

<210> 4340
 <211> 395
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-D2

<400> 4340

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tggttcaata ctccacgggg aaaacaacat ttataaagca ttactaaaa acaagttatc    120
caggcgctca tattgggcca gaggctacaa cggacagggt tgttgtcatc acttctggac    180
cagacgaaag atgcattcct ggaaacacca tcgccgtcca agctgacatg ccatacagt    240
gcctgtcatc gttcggaaca gcatttttgt ccaagttcga atgttctcag atgccacatc    300
cactgttaga gcacgtgacc ttcgtggaca ctccaggagt ttatcaggg gagaagcagc    360
ggacgcagcg cagctacgat ttcaccggag tcacg                                395
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<210> 4341
 <211> 350
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-D3

<400> 4341

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gaaaaacggg tttagacctac gggcctcatg tgtcagcgac aagagcatgt gaggcgggtg    180
cctcagcgcg atacggcgat ggcagggaaa acgatgtacg cacaatcggt gcatgactac    240
atgacatgag gtaagactga tggacgactc gacgtagaca gttggtacac aaaggagta    300
gtccacagct cgacgaggta gtcagggtat cagatgcaag cgacttgctg            350
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<210> 4342
 <211> 463
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-D4

<400> 4342

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gcaacagagc acacgccgca caccgccgcc gcctccgcag cagcagcagc aatggcgcgc 120
gccggcgctc tctgcttggg gctgctctgc ctctgggccg tgcactcagc cacggcgcag 180
aagtccacga cagccccggc cgccgcgccg gccgcgccca ccaccccgcc ggcgaccccg 240
accaagaagt cgcccgccgc cgccgccgcg ccgcccacca ccccggccac cctggccccc 300
gccggcgcg cgcaccac gccggccacc ccgcgcgccg ccgctgcgcc gccactacc 360
cctgccaccc tggcaccgc cgcggggccg cccaagtcg ccccaaagg gtcccctccc 420
ggccccgtcg ccaaaggcca aggccacccc gccggtggcc gaa 463

<210> 4343

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-D5

<400> 4343

ccacgcgtcc gagaccgatt aaccaccac cgctcgct cgtctccgt ctcttcctcg 60
gacaaagccg gggccgttcg gcgggaggca ggggacgcac gggcaggcag ccatgaacgg 120
catcaacccc aacggcggtt tctgtcgta cggaacatg gagagctatg cgatgtgggt 180
ggcgaccggc gtggcgctcg cttcttcgc gtccctcgag cgctgctcct gcatccacct 240
ccacaccgcg gaggacgac gcgacgagga ggaggaggac ctcgaggagg cccgccgctc 300
cttctccgc cgcacccctg agtactacta cgaccggctc ggctcctccg cctccgtcgc 360
caagatgtga cctgaccgaa ccgcgcctcc ctccgccccaa gaaatgcgtg gtgatacgat 420
tcgtt 425

<210> 4344

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-D7

<400> 4344

ccacgcgtcc aaacagctcc cgcgacgcct ccagctacct caccttcggg cccaacccgg 60
 cggatgatggg tccgggcacc atggagacgg acatcctgta caacgtggac gtgaagcctg 120
 catacggggc caaggtgacg ggcgtcttgg tgggcgggga ggcgctggac atcccggacg 180
 aggtgtggga cgccgagagg tttgtgggcg gcggtgtcat cctagacacg agcacgtcgg 240
 tgacgtcgct ggtgccggag gcgtacgcgc cggtgacggc ggcgctggac aggcacctgt 300
 cgcacctgcc gcggtgttac gagctggagg gcttcgagta ctgctacaag tggaccttca 360
 ccggcgacgg cgtggaccg gcgcacaac 389

<210> 4345
 <211> 395
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-015-Q1-E1-D8
 <400> 4345

accacgcgtc caatcacgac aagatggcgt gcacaaacaa tgcgatgaga gccttgttcc 60
 tcctggtcct cttctgcacg gtgcatggtg agaaggaaga gtcaaagggc atcgatgcga 120
 aagcgtccgg gcctgggtggg tccttcgaca tcaccaagtt gggcgccctcc ggcaatggca 180
 agacagacag cacgaaggct gtgcatgagg catgggcacg ggcgtgcggc ggcactggga 240
 agcagacaat cctcataccc aagggtgact tccttgctcg acaactcaac ttcacaggcc 300
 cttgcaaggg cgacgtgacc atccaggtgg atggcaatct gctggcgacc acggacctaa 360
 gccagtacaa ggacctgggt aattggatcg agatt 395

<210> 4346
 <211> 454
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-015-Q1-E1-D9
 <400> 4346

gtaccggtca anaattcccg ggccgaccca cgcgtccagt gggatcgagt tgtttcactg 60
 cagcagcaca tcctccggcg accaccggcc tcctctccg tcctctagcg accgaccaac 120

gcgtcgagcg aagatgtcgt ggcagacgta cgtggacgag cacctgatgt gcgagatcga 180
 gggccaccac ctcacgtcgg cggccatcgt cggccacgac ggcgccacct gggctcagag 240
 caccgcattc cccgagttca agcccgagga gatggctgcc atcatgaagg atttcgacga 300
 gccggggcac ctgcgccga cggcctgat actgggaggg accaagtaca tggatcatcca 360
 aggcgaacct ggagctgtca tccgtggcaa gaagggatcc gggggcatca ctgtgaagaa 420
 aacagggcag tcaatcatca ttggcatcta cgac 454

<210> 4347

<211> 417

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-015-Q1-E1-E1

<400> 4347

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 agccaaagct tgccatggcg gccgtccggt ccgacagggc ccaccaccac caccgccgct 120
 ccgaggcgtc gtgtccggca acctccgcgg ccgtggcggc ggcgagggcc gatgacgccc 180
 tgcgccagcg cccgcggggg ctctgtcagg tccgggagcg ggaccagggc ccgctgtcga 240
 cggggcacca gcacctgcac caccatcacc accagctgcg gcggtcggcg gcgttcccac 300
 cccgccgccc ggggccgggg cgcgcacctc ctacgcgtg cgaaagcgac ctcaacatca 360
 gggagcaccg ctctgcagc gaggtggccg gcggcacgcg ngcgggctgc gccgctg 417

<210> 4348

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-E10

<400> 4348

tccgggtcga cccacgcgtc cgagcctcgt gccttcaact cctccctggc atggaggaag 60
 tagctgtttc gcctatgatc gttgccgccg tagtgctgga caacaatggc gccgacgcgg 120
 tctctgcac tgccatccct agcgtaacaa taagcctaga ggagaaagaa aatatcaatg 180
 gggatgttcc cagcatcacc tcggccgcaa gcaacgagga ggaggcgttg ttcaagtgtc 240

gagaatccac caaggacgat ggccatcgct tgacgatgga atgcaccact cccgtctcct 300
ccagtagccc ttccactcgc aagaagcgcg gggcggttcag cctcttcagg gcgatgttcc 360
tgtccttcgg cgggagcgac gacagcatga agaagacaga cgacgacacc acgagcccca 420
ggaagagagc catcgcggt gctga 445

<210> 4349
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-E11

<400> 4349

gtaccggtca agaattcccg ggtcaaccca cgcgctccgat gccgcttcca ggagcctggt 60
gtcgcagaga aggagttctc gccggccaac gccgggtacc tgatgaagcg gatectgtgc 120
aaccgcttca cctcctcggc ggccggcgac gacaagcgac cgccggcgga cgccgccgag 180
gaggagccgc tgccgccgtg gctgacggag gaggacgtgg gccacttcgc gtcggagttc 240
gagcggacgg gcttcacggg gcccatcaac tactaccgca acatggaccg caactgggag 300
ctggcgggcg cgtggggcga cgccaaggtg cgggtgcccc ccagggttcat cgtcggcgac 360
ggcgacctca cctaccacta cccgggcatc caggactaca tccacaaggg cgggttcgag 420
gccgacgtcc cggggct 437

<210> 4350
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-E12

<400> 4350

ccacgcgtcc gacacgcgtc cgccacgcg tccgccacg cgtccggcct gttctcatcg 60
gccgctaaga gatgtagaaa gtgcaagaag ttctccgca gcgcgggcg gtgctgctgc 120
tcgccgtcgg cctcctccgc cctgctggt ggtgtgcgcg gcaacgaaga ggcgtcgacg 180
tcggcgctgg cttccgcgcc agatggcaag aaaaagaaga ggtggaggaa gagaaagttc 240
tgagaaaga agaagaaggc caagaaggag agcgacgatg gcagcggcga gctcgtggat 300

ctcgtcaaca gcttctcggc caagtccgac gtgtgcaaga acgtgaatgc ggccgaggag 360
atcctacggg gctgcaacca gaacatgcc agcaaggcgc tgacgttcag ccagctgggc 420
gccgcgaacg ac 432

<210> 4351
<211> 418
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-015-Q1-E1-E2
<400> 4351

attcccggt agaccacgc gtccaaaaa acttggtaga agcatatgct caatttgtga 60
aagattatta cattaataaa atggagacac caccatcctc gtatgatcga gaatatctga 120
aggaaacaac tccacatgat tctagtaagg ttctaggtc tggtgggtcc aagtttgcag 180
tgaggttgcc tactttcaag tggcacccaa aaatgacagc gtctgttctg caaggatcaa 240
tacgaggtag catttggacc tatgcagaca tgtctttggg gaaggcggtt atcccgatgt 300
gttcatgacg aacttgtatt atggaggcac aagaatcgct gcttctaaaa tctgtgtttac 360
aaatggctcc caagacccat ggcgccatgc ctccaagcag aaatcatcga aagacatg 418

<210> 4352
<211> 410
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-015-Q1-E1-E3
<400> 4352

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acagccagct cgcgaaaata atgaagagcc gcagcatggc atcatcggcc gcgctcttgg 120
tgctagccct cgcgctagtg gcggccaccg cccacaggt agcggaggca aagaagaaga 180
gagcggcgga gagcggcgag gcggcggagg cgaagaagat ccaggacgac ttctgtctga 240
cgctgtgcga gggcaagaag gggacggacc tggtcgtgtg caaggagtcc tgcgcgctct 300
cccagcagtc caacctggtg ctgtacggca ggatccagtg caagggaag tgcaccgagc 360
agaagggcat cacggcgccg gccatgaagg tctgccagga ggagtgcgac 410

<210> 4353
 <211> 397
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-H7

<400> 4353

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ccacgcgtcc acccacgcgt ccggcagtc tctcctccat caccaccacc aagctcaaca 60
acagccagct cgcgaaaata atgaagagcc gcagcatggc atcatcggcc gcgctcttgg 120
tgctagccct cgcgctagtg gcggccaccg cccacaggt agcggaggca aagaagaaga 180
gagcggcgga gagcggcgag gcggcgagg cgaagaagat ccaggacgac ttctgctcga 240
cgctgtgcga gggcaagaag gggacggacc tggctgtgtg caaggagtcc tgcgcgctct 300
cccagcagtc caacctggtg ctgtacggca ggatccagtg caagggcaag tgcaccgagc 360
agaagggcat cacggcgccg gccatgaagg tctgccca 397
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<210> 4354
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-019-Q1-E1-H8

<400> 4354

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gggccgaccc acgcgtccac tggaatggga tctgatctct ttgggtcata cgcagagtct 60
tcttgtgctg cccttgttgt tgcgtctatt tcatctttcg gaatcgacca tgatttcact 120
gggatgtgct acccactcct tgtagctct gttggtatca ttgtctgctt gatcaccacc 180
ctttttgcta ctgatttctt tgaagtcaag gctgtgaaag aaattgagcc tgcacttaag 240
aagcagctca tcatctccac cgtcctgatg acttttggtg ttgctctaata cagctgggtg 300
gcccttcag ctaagttcac catctacaac ttcggtactc agaaggaggt ttccaactgg 360
ggtttgttct tctgtgtttc aattgggtctg tgggctggtt tgattaatgg gtttgtcaca 420
gaatactaca cta 433
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<210> 4355
 <211> 298

<212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-A2

 <400> 4355

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 tatacatgaa gccttgaact acagtgtacc atgcaggaag tagaatgcta tgatatgagg 120
 catcctgttt ccaaacatat aaaaggagga tgaggaggac gaaactgagg ctacttacac 180
 gtacgtacct acagcacacg cgcaaatcac attcacgaat cacgaatcga gctgagaacg 240
 gcatttaatt tgcttctctt cgatcgattc gaccctctgt ttccatgcgc gcgctcga 298

<210> 4356
 <211> 212
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-A6

 <400> 4356

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 gagccagaag aatgcgcagg cagaagatag aatcgggtaa agatatgagt aaatggacga 120
 agggcaaggt gacgagcttt tagagcaggt gaatcatacc ttgcttgaca gatgtctcga 180
 gcaggaatca tagatcatgg tagactacga ga 212

<210> 4357
 <211> 388
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-A7

 <400> 4357

 ggtcaggaat tcccgggccg acccacgcgt ccgcggacgc gtggggccgg ccggggatca 60
 gcgacgtcgt ctgcgcgctc tegtctctcg ccgatccgca atactaccct cccaaggca 120
 cgggagccga gcagaaggcc acagccacag gtcgagagag taaacccaag gaggatacta 180
 cagacaagga tagcagtcct cataaggccg aaatgatcag ggcagacgac gaaacgaagc 240

atagatgatg accgtagggg gaagctaacc acgggaaagg gaggaacact gcagagctgt 300
ctgtctgctc tcttgaatct tctttttgta aagcgtagac cactgtaggca ggatgtaaca 360
acaacattca aggagttatc ttgactga 388

<210> 4358

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-A8

<400> 4358

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agcgacgtcg tctcggegt ctcgttctc gccgatccg aatacgaccc tccccaaggc 120
acgggagccg agcagaaggc cacagccaca ggtagagaga gtaaacccaa ggaggatact 180
acagacaagg atagcagtcc tcataaggcc gaaatgatca gggcagacga cgaaacgaag 240
catagatgat gaccgtaggg ggaagctaac cacgggaaag ggaggaacac tgcagagctg 300
tctgtctgct ctcttgaatc ttctttttgt aaagcgtaga ccacgtaggc aggatgtaac 360
aacaacattc aaggagttat cttgactgac aaagaacaag aaatggccgg ccgctccaca 420
gga 423

<210> 4359

<211> 315

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-A9

<400> 4359

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ctcgagcaga taagtctcgt ccgtgtccga cattcagaag ggggacatga atttcgctgc 120
catagtctcc attcctgcga ctaccttcgc catcagcttc ttcgtctctca tcagtgcctc 180
gattggcacc gcagtctaca ccaatctcct cgactacgtc atccagggat gtgtctactg 240
ctacagctga ctaccggat tcgtgatcaa tgcagcaac tacatcgctg gcaccatcgt 300
taggctgtac tgcac 315

<210> 4360
 <211> 377
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-B1

<400> 4360

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 ccgacgtagt agcatgagaa tttctaattt ttccatgaaa agaggccctt caatggccat 120
 gagagctcct tcagtagcta tcagagctcc ttcaatatct ctgagagggtc cttcaatgtc 180
 ttcaagagca ttttctgtgt ctgtaaagga agaccaaatt tccccaaaga aatcagacga 240
 ggaaacggaa tcagtgttgg tgaagctgag cgcccgtcag atcacacttt tgctatcatc 300
 catttgggct caagcaacat cncctgaaaa tactcctgtg aactatgaag ccattgctca 360
 tacttacagt ttgcttc 377

<210> 4361
 <211> 123
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-B11

<400> 4361

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 gttcaagcca gacgagatga cccatatcgt taaagacatc gacgagcctg ggtttctggc 120
 cgc 123

<210> 4362
 <211> 343
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-B3

<400> 4362

cgggtcgacg cgcggtccg cccacacgtc cggccgtaca aggactacaa ggagtgggtg 60
 tggaagtcgc agggcgacgt catgatgaac ggcgccttct tcaacgagtc cggcggccac 120

aacgagcgca agtacgacag gttcgacttc atccccggcca agcacggccg ctacgtcgggt 180
cagctcacgc gtttcgccgg accactcaag tgcacgtcgc gccagccgtg ctagtagaca 240
gcgccccggg cgggcacata ctctcttcc tatatacatc ggatttggat gggcggcata 300
tatgtacgtg tgtgtaatat attattacta catcttgtag tat 343

<210> 4363
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-B4

<400> 4363

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aggcattccg ccggccttca ggaacggcgc cggcgacggc gggtagaggc ccgacttcgc 120
cgacggcaac cagtacacgc cgcccaaacg gaagtgggccc ttctgtggct gctgaatcga 180
agctcgctgt gctgctgtgc tgactcgaaa ggagaacgga tcgtgcagca gctcaagtga 240
tccaggatga tgggagcgcc gagacacgat ggaaggcatt aattatttca gccatggtgt 300
ttcgcttgc tttaaccttt tgctcatctc taccgaggaa cactagttcc atcgggtaac 360
tgaacctgca aatcttcatg atgaaactgt cgcacatcaatt ggttcc 406

<210> 4364
<211> 444
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-B5

<400> 4364

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cgccaagga caagtgggtc aagccgcgc aggagcactt cgacctcagc atgcccgct 120
tcctccagat cgcgcaggag aaggccggca tcgtgcccac ctctatcgc aggttggcgt 180
gcgcgaagca gggcggcatc cggtagacca tcaccgggaa caagtacttc aacatggtga 240
cgatcaccaa cgtgggcggc gccggcgaca tcgggcgggt gtcgggtgaag gggagcaagc 300
gcgtcaagtg gacggagatg aagcgcaact gggggcaagt gtggcagacc ggggaagacc 360

tcaactggca gtccctgacg ttccgggtga tgactagcgg acaacgcaag ggcacctcat 420
ggcacgttct ccccgctgac tgga 444

<210> 4365
<211> 439
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-B6

<400> 4365

ccacgcgtcc gtcctctctt gccggtcccg aataaagagc agcagcgcaa gaggtcggta 60
gagcgagaag aaggcaatgg cggccgagag ctctcttttc acctcggagt cagtgaacga 120
ggggcacccc gacaagctgt gcgaccaggt gtcggacgcc gtgcttgacg catgcctcgc 180
gcaggacccc gacagcaacg tggcctgcga gacctgcacc aagaccaaca tggatgatgg 240
gttcggcgag atcacgacca acgcgaccgt ggactacgag aagatcgtgc gcgacacctg 300
ccgcgagatc gggttcacct ccgacgacgt gggcctcgac accgaccgct gcaaagtgc 360
ggatgaacatc gagcagcatt ccccgacat cgcgcatggc gtgcacgggc acttcacgaa 420
gcggcccgag gagatcggc 439

<210> 4366
<211> 343
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-B7

<400> 4366

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ccgccagcag gttcagccgt tcgtgttcat gctaaaacga gagaaggatt gcattgtctc 120
aggagactgt cataatcttg tttctcatct tcgcaacaca ggtgggaacc atcgatgcca 180
acatgagagt agccatgccg atgcatgcca taataatgga gaaagcgaaa tatcatgaga 240
ctgagaataa agacgagaaa agcacagaga aagaagagag tcaatgctta tcgacgactc 300
tccagttata gggtttctgc ttcaacagct acagatgcac cga 343

<210> 4367
 <211> 287
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-B8

 <400> 4367

 ccacgcgtcc accagatgtc gattgagacc cgccttgaca agcaatcata tacgtttggg 60
 ccgcaaacac gtctcagctt acgatgatct tgctcaaaca atacaatgag ccattgtcac 120
 acgaagctgt cataatcgtg agtctcctca tcacagcaca cgtcgtaagc agacgatcaa 180
 gcatgggagt actgcagctc atacatgcct ttgtatcaga caaagttact gattatgaga 240
 ccgagtcgac ggacgatacc accactatta aagaagagac tcaatgc 287

<210> 4368
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-B9

 <400> 4368

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 tctgggctga aaacacatgt ctgctagttc atcaagccta agaccgagac taacgcacgc 120
 tatggtctag aagaattctc aataacgctg ctttcttgcc gtgaatacga cactgcattg 180
 gaacgacgct gatgatgagt ccccgatagc tagaccaggt ccaactgccac actgcatcaa 240
 aggatcttgc tgcttctgtg gccgaatcaa cggacaagcc ctcgacattg gaacccgaga 300
 cgatggatc accactagat actccagcat agtagatggc aagctctgag gagaccacga 360
 cgcagccagc taatgccgtg aaatctgcc aagtgaagac caacgatgaa agg 413

<210> 4369
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-C11

 <400> 4369

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gtctgccccg ggcagcgaag caactcctcg catgtctcca tcaagaacgt taactttcgc 120
aacaactccg ggaagttggt caagcccgaa accgttcagc tgctctgctc cgagacgcag 180
ccgtgcagcg gcgtctcgct catcgatgtc aacgtcgagt acgccggcaa gaacaacaag 240
accatggctg tgtgcagcaa cgccaagggg aaccgccaag gggaagcctc caggccctgg 300
attgcctcgt ctgatcgatg accttgcat tgcattgcatt cttcttccgt ttcacttttc 360
catattctat tgcgttcag ccaagcatcc tgtttccttt ataaatatat atatatatat 420
a 421

<210> 4370
<211> 448
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-C12

<400> 4370
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cttttttttt tttttaaaag acagtgcgt tggttttatg gatcaaaacc agaattttca 120
tgtttcacaa ttttggtgct agagatcccc aaactgccta actcactggg gaaggtttct 180
gaagggtgtc attatagtaa acagcagcaa aatacccaac aacgttactg ctaaaagcag 240
ctgctcctgc ttgcgccttt agaatactag ccgtaaaaca gcaaaaaccc gcacatctgt 300
gtcagcagtt gggatgtgag ctactctaaa caacaaacaa ctgtgaacag tccaaggcag 360
gacctctaca atcatactgg gcaagcgtg agctgtgggg agaaaatgtc agcacatgcc 420
caagaggaga caatgcacac gtttagta 448

<210> 4371
<211> 391
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-020-Q1-E1-C3

<400> 4371
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tcttctctccc cgggcatgng aggaagtagc tgtttccccc tatgatcggt gccgccgtan 120
 tgctggacaa caatggcgct gacgcggtct cctgcactgc catccctagc gtaacaataa 180
 gcctagagga gaaagaaaat atcaatgggg atgttccac gatcacctcg gccgcaagca 240
 acgatgaaga tgcgttggtc agtgtcggag aatccaccaa ggacgatggc catcgcttga 300
 cgatggaatg ctccactctc gtctcctcca gtagcccttc cactcgcaag aagcgcgggg 360
 cgttcagcct cttcaaggcg atgttcctgt c 391

<210> 4372
 <211> 362
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-C5

<400> 4372
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 ttgttcctcc tggctctctt ctgcatcggt catggtgaga aggaagagtc aaagggcatc 120
 gatgcgaaag cgtccggggc tgggtgggtcc ttcgacatca ccaagttggg cgctccggc 180
 aatggcaaga cagacagcac gaaggctgtg caggaggcat gggcatcggc gtgcggcggc 240
 actgggaagc agacaatcct catacccaag ggtgacttcc ttgtcggaca actcaacttc 300
 acaggccctt gcaagggcga cgtgaccatc caggtggatg gcaatctgct ggcgaccacg 360
 ga 362

<210> 4373
 <211> 353
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-C6

<400> 4373
 ccacgcgtcc gccacgcgt cgtccatgt cgtgactgca tgtgccgctt gaacagaaca 60
 gagcactcta aatccaaaca cagtagatag tatctcatag ttgcatttcc agactaacc 120
 tattctttct gacatccact ttagtctgtt catgcctcag ttgctgtgcg gcttttact 180
 tcatcagcag tcatagtcgc cagttgcgac agcattgaga gcaacctatt ctccgtatat 240

aacgggttttt ccatgtatag catatgccag aagaagccca aattcgtccg tggagtactg 300
 aagcaattgt gatgctaagt atacatcatc tgagtatgat tctcaacaac cga 353

<210> 4374
 <211> 237
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-C7

<400> 4374

ccacgcgtca gctcaagcgt cagtccatta cgcgggtgga agcagacgct tgagagacat 60
 agcgaatacg aagcgtgtac gacggtacag aggctcgcac gctggtagtc ctgtaggaac 120
 tcgagacgtt ctgacaggca gatgactcgt tgcagtcctg cgattctaag gtgacttaca 180
 ggacaagatc actgatgggc gtgacttaca aggtcaccct cagcaacggc gacttcg 237

<210> 4375
 <211> 433
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-C8

<400> 4375

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 gcagatctcg agaagttgca gctccccaca atggaaggtc tggctaaaaa actaaaaaag 120
 aactctggga gcaagatcga gtctgctatt gttggtacgt acgtgctgtg gaacagctaa 180
 ccctttgtgt ctgttgaaat tctgaaacct gactgctata tgcttggcag catatatcag 240
 tctgctattg ttgcatgtca tccatcagaa gcacctacta tgactgccag ctggtttaac 300
 tccaagtcag gaaagaagat tcctttgaaa tcagtcactt caatcgtcga tgggctaaag 360
 aaatcgtaca ttgagaagtt gatgcccttg gaaaaaacct atcagttcca tgacttcgtg 420
 tctcncttgc tga 433

<210> 4376
 <211> 435
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-D11

<400> 4376

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ggacctcgcg ggccacgtgg tggcgggcgcc cgagtactgc cagccaact tcagcaacta 120
cttcacggac gccttctggt cgcacccggc gctcaacggc accttcacg ggcgcgccc 180
atgctacttc aacacgggcg tcatgggcat ggacgtcgac aagtggcgcg ccggcgggta 240
cacgcgcccg gtggaggagt ggatggccgt gcagaagcgg cggcggatct accacctcg 300
ctcgctgccc cgttctctgc tcgtcttcgc cggccacatc cggcggtgg accaccggtg 360
gaaccagcac gggctcggcg gcgacaacgt cgagggcgcg tgccggggtc tccatccggg 420
ccctatcanc ctctt                                     435

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<210> 4377
 <211> 440
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-D2

<400> 4377

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ccacgcgtcc gcccggtcgc acgacgggta cgcgcccatc gcgcgcatgc tggcgcgcca 60
cggcgccgtg ctcaacttca cgtgctgga gatgcgcgac cagcagcagc cgcaggacgc 120
gcagtgccgc cccgaggcgc tgggtgcagca ggtggccgcc gcggcgcggg aggccggcgt 180
gggcctggcc ggcgagaacg cgctgccgcg ctacgacgac acggcgcacg accaggtggt 240
ggccactgcc gccgacaggg ccgccgatga ccgcatggtg gccttcacgt acctgcgcat 300
ggggcccgcac ctgttccagc ccgacaactg gcgccgcttc gccgcgttcg tcaagcgcat 360
gacggagccc ggcgcgcggg aggcgtgccg ggagcaggtg gagcgggagg ccgaggcggt 420
cgcgcacgcc acccagcccc                                     440

```

<210> 4378
 <211> 361
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-D3

 <400> 4378

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 acctcatcac cgaggcgtcc ggcacatgt ccgcaggcat cgccctgcca ccctccaacg 120
 ccggagcgcc ctctacggc gcggcgggcg cttccggggg ctccgccgat gccccgcgcg 180
 gcgcctccga gggccctgcg agcgccagcg gcccgtctgg tgacgacgcg ccggcggtccg 240
 gtgctggtgc cagcgcgtcg gctgctgatg cttccggggg ggcnngnetca tccgggtccct 300
 ctagegcacc agcgccatcc tcgtcgtctg agtcctccgc cgcacatgc ccatcttctg 360
 a 361

<210> 4379
 <211> 374
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-D5

 <400> 4379

 ccacgcgtcc ggttctagat cgcgaggatc cccccacacc ttgagacctg cgttgtcacg 60
 caccatcga ggttggggcc gccagcaggt tcagccgttc ctgttcttga taaaacgaca 120
 taaggatggc agtgtttcat ggagctgtcc tattcttgtt tctcctcctc gtcgcagcat 180
 aagtgggaaa cagcgtatgcc agaatgggag tagccatgct catgcatgcc ttgataatgg 240
 agaacgcgaa acagcatgac acggataata acgaggagaa cagcacggag aacgaataca 300
 gtcaatgctt atcgccgaat ctccagttcg agggcttctg cttcaacagc gacagatgcg 360
 ccgaggtgtg catg 374

<210> 4380
 <211> 432
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-D6

 <400> 4380

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aggagtgggg atgaagcaat tcagtaaagc tgcaaggag ctcattggca tgcttcagaa 120
gattgatggt gacaattatc cagagaccct gtgccgcgatg ttcattcatca atgcaggcca 180
gggattccgg cttctatggg gcaccgtcaa gagctttctt gacccaaaga ccactgcaaa 240
gattcatgtt ctgggtaaca agtatcagag caagcttctc gaggtgattg atgctagtga 300
gttgccagaa atttttggtg gaacctgccg atgtgaacgt ggttgcataa aggctgacaa 360
anggccttgg aaggaccccg aatcatgaa aatggttcaa agtgggtgatg ggaggtgtgg 420
atcactcggg ac 432

<210> 4381
<211> 305
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-020-Q1-E1-D7
<400> 4381

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tcgtcttcgc agcacacaca tgtttaatag tttcaggagc tgggattgct cgattaactc 120
aactcatgct gacgagcatg tatgccccct gtggtactgg ttccacatgt gtgcaggagt 180
gcttaaccgc cttctaggcg atgcctacga gacctgcccg aagtgtcaca gtcagcgtca 240
ttgattgata gtgagagcat ctacagcacg ctcgaagctt gatgacggtg attgttactg 300
ctcag 305

<210> 4382
<211> 431
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-020-Q1-E1-D8
<400> 4382

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tggtcgtcga tgcgggcaca ggttgcgatg gctgtggtgt tggtgttctt ggtgagcggc 120
gcatggtgcg gtcctcccaa agtcccccca ggcaagaaca tcacggccac ctatggcaat 180

gactggctgg acgctaaagc gacatggtat ggcattgccga caggatgccgg tccccagcagc 240
aacgggtgggtg gctgcgggta caaggacgtg aacaagcccc ccttcaatag catggggcgca 300
tgcgggaaca tccccatctt caacgatggg ctgggttctg ggtcctgctt cgagatcaag 360
tgcgataatc ctgtggagtg ctgcgggaac cccgtgggtg tgcacatcac ggacatgaac 420
tatgagccta t 431

<210> 4383
<211> 364
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-D9

<400> 4383

gggtcgaccc acgcgtccga gacgacgggt actggatcga cattgtacgt gtgtgctact 60
tggacatcat cggctacgta agccatgaca ggcaagcgcc agcagtgtgg agcaaaaact 120
catgcacacc gaagtacgac agtatcatca tgctcatctc gctgaagatg gacatcatca 180
accacggaga cgtgtccacg gtcacgcagt ccaagtcgaa gttcttcgac atgaacatgt 240
agcgctacaa tgacatgcc aatcaaagacg tcaccataac ggcacccggc gacagatcca 300
acagtgtctg aagtcatatg tgcgactcat cggggatcac gatcaccaac acagtctttg 360
gcat 364

<210> 4384
<211> 369
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-E11

<400> 4384

gggtcgaccc acgcgtccgc acaagcctcc gggctgggag actacctgct tgaacagggc 60
atgtaactac tacgtaccag ctggaatgca tgtcgacgac gatggcttcc agtttcgacg 120
tccaataata gtaacaacaa agcaaagggc ctctctccgg agtaattgct ttggctcttc 180
tcctccaagc cataagatat ctaacaattg gtgactcgcc ttaattagtt cgctttgctt 240
ttgaggttga ctgcaccatt ttgctgtagc gtgaattgca tggacatgca acgctccaat 300

ggacttttggga atgtggaatt tttttttccc gtttctgtac ttttcctaga agatgaagta 360
atgaactgg 369

<210> 4385
<211> 221
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-E2

<400> 4385

cacgcgtccg ccacgcgtcc gccacgcgt ccgttttttt tttttttttt tttcttatat 60
tttttttcgg tttttttttt ttttattgtt tttttttttc ccacgcgtcc gccacgcgt 120
ccgccgacga tggcgctgaa taagacagtc ctcacgtcg cggggatgct tctcatcagg 180
ctcgtgctgg aggctgcccc tccggggggc gctctagagg a 221

<210> 4386
<211> 399
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-E3

<400> 4386

ggtccagaat taacgggtcg acgcacgcgt ccgcggacac gtgggaggac gcgtgggcgc 60
gaggagagct cggagcggcg aggtacgggc cgtcagatgc tgcagctgc cagcgccgcc 120
tacggctatt ttaacccgc gtcctgccg acgccgact cgccccggc ctectccgc 180
ctcccagatc tcgctcgctc ggcgccagtt gcctcgagc ttggatcatc tcatacctcg 240
gcgaagatga gggagatcct gcacatccag ggaaggcaat gtggcaacca gattggcgcc 300
aagttctggg aagtgggtgtg cgatgaacat ggcattgacc ctaccgggcg gtacactggc 360
aattccgacc ttcagttgga gcgtgttaat gtccactac 399

<210> 4387
<211> 173
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-E4

<400> 4387

gtgacgggtca agaattcacg ggtcgaccca cgcgtccagt gcctccagct aacgaggccc 60
tgacatgcat ctgctgcatt gctacacgtt cgttcgtgtt cacaactacg ctttgtttctt 120
tcgttcaaaa tcaccgaccg cagcttggtc agctagtact ttgttatattg gcc 173

<210> 4388

<211> 353

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-E5

<400> 4388

ccacgcgtcc gcggacgcgt gggggcggcg cacgacctct cctgttgctg ctgctggctg 60
ccatgctagc ggtggccgcc gatgtcgcca acgccggcca cgccaagccc ctgacgcctg 120
gcggggcgcgt ggtacacgac aaccacggca agttcacggc cgggccgtgg aaaccagccc 180
acgcgacctt ctacggcggg cgggacgggt ccggcaccac ggcgggcgcg tgcgggtaca 240
aggacacgcg cgcgagggg tacggcgtgc agacggtggc cgtgagcacg gtgttggttg 300
gcgacggcgc ggcctgcggc gggtgctacg aagtgcggtg cgtggacagc ccc 353

<210> 4389

<211> 317

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-E6

<400> 4389

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ttgtcctaac aatacgtact ttatatatga tctctctcag tgctattact ggagtaacca 120
gcaggatact cactctgctt agaggtgaca aagtccgcat acacttacag gcacatgaat 180
aaatgagaag cagtcagcgc ctgttacgac gaagagccat accatccgtt tcgttgtagt 240
tgtagctgga tacgtcagtt ttgcactatc gaacgacaac taagtcgaag ctgatagagt 300
aagtgttaaca cgtttat 317

<210> 4390

<211> 403
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-E7

 <400> 4390

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 tcgtcgcggc gatgcgtctc atcacgctcg tgctggacgc cgcccctccg gcgaccgcca 120
 tggactgcaa ggccgggtgt gacgatgtca cgggcccact ccacatgaac atggaggact 180
 gcatgaaaag gtgcaaggac atcgctgcta agcaagggcc tagggaccct tacaaggata 240
 acaaacttga catcccatga actagttaat gtcctatat catctgccta tccatgcatg 300
 cattgcattg cgtatgcaca ctgtgcgtga ctgccacac agttcgacaa tacaccggat 360
 ctcgatggga ttgtaatcgt gtccactcga tcgagagatc gat 403

<210> 4391
 <211> 376
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-020-Q1-E1-E8

 <400> 4391

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 ctccggcgac cgccatggac tgcaaggcct ggtgtgacga tgtcacgggc cgattccaca 180
 tgaacatgga cgactgcatg agaaggtgca aggacatcgc tgctaaacag gggcctacgg 240
 acccttaciaa ggataacaca cttgacatcc catgaactac ttaatgctcc tatatcatct 300
 gcctatccat gcaagcattg cattgcgtat gcacactgtg cgtgcctgcc catacagttc 360
 gacagtacac cgatct 376

<210> 4392
 <211> 404
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-E9

<400> 4392

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cttcgaggtg acaccggcct ttcacgtcgt cgaggtgaag aagtcggcag gcgacacgct 120
ggagtatgag atgttctgca gcaagggcct aagaccttca ctacgcgaca tctgctggag 180
cagccgatct gaggagaaca tggctccttc agtgggttcag ccatcacaat tggagccatc 240
ctcttagacc gtctccgaca gtttactcac ccctcttagt cgattgttat ttaagtgcag 300
tctcttcgga gatgcaatta cagtccatcc tctctttctt ttcccccttc tcaaagagct 360
aggaccttgc tcgactgagc atcaggctgt anggctcttt gtga 404

<210> 4393

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-F3

<400> 4393

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tggttccatg gctggaacca tacatgaaac tttccttgca atatacagtg ggaaacttct 120
acagagcttg gctgtagcaa ctagccaagg gtcattcttg tcggtggatc agattatcta 180
caatggaatc ggctttacaa ttgctgcaac ttccactgct gctatcacta tttatgcaaa 240
gaaagcgctt caaaagctcc aagcggagga cgagatattt tgagaggtcc aaggccagga 300
tcaaaccctg aacgctagtt ttctttcagg tgtactatat atgaacagct ggtactaatc 360
tggtttcctg tgtcgactac cggactgcta ctaacatcca tc 402

<210> 4394

<211> 436

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-020-Q1-E1-F4

<400> 4394

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ggttccatca tgatcctact cgtcctcgcc atcgtcggcg ttacctacta cgctgtcgtc 120
 ctctgcaact acggccccgc cctcctcacc ggcgggcgga ccactctcgc cgcgctcgct 180
 gtctgtctcc tcttccactt tctgcttgct atgcttttat ggagttattt ttctgtggtg 240
 ctactgacc ctgggttctgt tccaccaaatt tgggaatcttg attttgatgc ggagagggga 300
 gaaactgctc ctctcactag ctgagagttc agtagccaga tgaattcaca gcaatctgtg 360
 gctcttgga atacggcaaa tccaaagggc aaggtactgt angaaatgca accagttgaa 420
 gcacctcggt gccaca 436

<210> 4395
 <211> 440
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-F5

<400> 4395
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 aaaaaagtct caaggggtctt gattcttgta tgaactcaag atttatggtg gatcttggag 120
 ctgtgggatg ctaagcctgg tctagctact agattatgaa ctctctgctg atctaatagc 180
 atttctacaa gaattctttt gctggaaggt ttattagtta tttgcaacaa tgaaggaaca 240
 tctaattgctt aatattgatg acctaagcat tcttgagcct aacgaggtca ttgggacagt 300
 caagaataaa tcatctgggg aaaccattgc acatccaacc tccatggctc aatgcatttt 360
 agcagtggga gaaagcatgg tttctgaagc ggaacctctt ctgcaagtgg tggagtgtcg 420
 catttgtcag gangaagata 440

<210> 4396
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-F6

<400> 4396
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 aaatctagac tatattactt atagaaataa gcgggggtccg tgccctcact gggctacaca 120

taggtccgcc cgggccccgc ggagccgcgg aggcgcggac cgcggagcgg gagcctgacc 180
catatccatc cctccgggcg cggagaggag ggggaagcag agcagcgggc gcggcggaca 240
tgacgccgat gcggctggtc gtccgagcct gcaccgcacc ccccatccgc gtactggaag 300
tcgaggaagt cctggaagct gctctccctg tacattgctg ggttcacctc gtcgaccagc 360
tcctcggcgc agcagacctt ctctccttg gagagactat ggatgctggc aatggaaatt 420
cttgcttcat cag 433

<210> 4397

<211> 443

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-F7

<400> 4397

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cactggcgtc cgcgtcctt ggtgcggcgc cggccgccgc gaacgcgccc ggcggggcgt 180
tcagcaactg ggtggcgatg aaccaacaga gctacgcgct gtacgcgcag aagtccgtcg 240
gggacggggg caaggagccc ctggacaaga agctgtcaga ggcggagaag atcaaggcca 300
cctacgtggt ggaccccagc ggtaacggtg actacaccag catcaccgcg gcgctggagg 360
atatcccggg gagcatcacg aagcgcgtga tcctggatat caagcccggc gctcagttcc 420
gcgagaagct gttcctgaac atc 443

<210> 4398

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-F8

<400> 4398

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ggagagcaac ggcacctgga agttcccagg catcggcgcc ttccagtgca acgacaggta 120
catgcgtagc cgctgcagg cggcagcgga ggcggccggc aagcctgagt ggggccacgg 180

tgggccgacc gacgctggcg gctacaacaa ctggccggag gacaccgtct tcttccgcgg 240
 cgacaacggg ggggtggagca ccgagtacgg cgacttcttc ctgtcgtggg actcgcagat 300
 gctgctggag cacggcgacc tcacctgtc gggcgccacg tccgtgttcg gcgcccgcgc 360
 cgtggaggtc tccgtgaagg tggccggcat ccactggcac tacggcagcc ggtcacacgc 420
 cccggagctc accgc 435

<210> 4399
 <211> 323
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-G2

<400> 4399

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 agtggtgata agtcccacta taatgagtgt tttttaaac ccattatagt gatttgagag 180
 gggattttta gattatgtca ggcaatataa ccgtgcgttc tcaattgggt caacccaac 240
 caacgtccct tctcccttcc cgaagggttg atcgctcttg gtccttttga aagaggttac 300
 ttccccaag gatacaaggt tgg 323

<210> 4400
 <211> 457
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-G4

<400> 4400

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 ccatgctgga catcgccaag tgctctacg acgccatctc ccggatggag agggcgctccg 180
 agaaggggaa ggcggcgatc gccaacgtcg cggctggcga cgacaagtac tccatcgctg 240
 aagctctcaa ggagcaaag ttcaagccct gcttgtctgc cattattggc gaagactcaa 300
 cagtcgtcat ggtgtcgcct ggtgattccg tccttgacg taccaagagg atggtggaag 360

cgcatgcgac ctcagccgta gtggccgtgg ggagcaagcc gcaaggcatc ctgacttcaa 420
 gggatatctt gatgcgcctg gtcgctaaga acctgtc 457

<210> 4401
 <211> 440
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-G5

<400> 4401

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 catatatata ttcttgccaa gataaaggta atggagtcgt cacgcagggt ccagccggcc 120
 gtcacacctg ttctctgtct catttgtgtcc accgatatgg cacaggcaag ggaatgcgag 180
 aagtacagtg agcgatttgt tggggcatgc atgatcgcag acaactgcgc caatgtgtgc 240
 cgcggtgagg gcttcttggc cggcagggtc agcaccttcc gccgccgctg catctgcact 300
 atgcagtgtc aaacaagatc gctcgatcgt tcgccatgca tcgacaacct attcttaata 360
 acgttcatta atctcgtcct atttatgacg aatgtcatgt atgtcctggt gactgtcatg 420
 tatattctga tgactgtcat 440

<210> 4402
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-G6

<400> 4402

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 cccgcccttt tcttcgaca tccacaaggg gggaggggaa aacacgtaca ttcaccggc 120
 ggcaataatg gcctcgggtc cggctccggc gacgacgacc gccgccgtca tcctatgcct 180
 atgcgtcgtc ctctcctgtg ccgcggctga cgaccgaac ctccccgact acgtcatcca 240
 gggccgcgtg tactgcgaca cctgccgcgc cgggttcgtg accaacgtca ccgagtacat 300
 cgcgggcgcc aagggtaggc tggagtcaa gcacttcggc accggcaagc tcgagcgcg 360
 catcgacggg gtcaccgacg cgaccggcac ctacacgac gagctcaagg acagccacga 420

ggaggacatc tgccag

436

<210> 4403
<211> 338
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-G7

<400> 4403

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cccgcccttt tcttccgaca tccacaaggg gggaggggaa accacgtaca ttcacccggc 120
ggcaataatg gctcgggttc cggctccggc gacgacgacc gccgcccgtca tcctatgcct 180
atgcatcatc ctcacctgtg ccgcggtgta ctaccgaac ctccccgact acgtcatcca 240
gagccgcatg tactgcgaca cctgcctgct ccgggttcgt gaccaacgtc accgagtaca 300
tcgcggggcg caatgtgacg ctggactgca agcacttc 338

<210> 4404
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-G8

<400> 4404

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gaggggtccg ccatgacgtc gtccgtgcgg cagtgggtgg gccgcgccgc cgctgcgtc 120
aaggacagga ggagcctgct cctggcgcg ctcgccccgc gccggggccg gtcgtcgtcg 180
tggcaccacc gggagctgga ggcggccgtg atccgcgcga cgagccacga ggatcggtgg 240
atggactacc ggagcgccgc gcgggtgttc gcgtggggcg gctcgtcgcc cacgttcac 300
cggcccgtca tgtggggcgt ggcgcgccgc gcgcggcgga cgcggtgctg ggtcgtggcg 360
ctcaagtcgc tcatgatggc gcacggcatc ttctcggct cggggccgcgc gccgcgcgcc 420
ggccgcgtcc ccttcgag 438

<210> 4405
<211> 280

<212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-C7

<400> 4405

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 acaatgtgac gcattaccgg ctgacgggtga ccgcggggcac cttctgctac atctatcctg 120
 agtaccatca gacgggcaag ctggggcgtca agtcatacat ctactccctc tgcgtgctcc 180
 tgctgcaggt ggtcaccacg cggccatcca tggggctcac gcatcatgtc cagaatgccca 240
 tccacgcggg cacctttgaa ccaatgctcg acatcacctg 280

<210> 4406
 <211> 215
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-C8

<400> 4406

ccgggtcgac gcacgagtc acgggctcgc acgcttggtg cctccttcgg tgctgataa 60
 cgtattgcag tagcggatga cagtgcgat cggcaccttc tgcaaaatct atcctgagta 120
 ccatgggtcg agcagcctgg gagtcgagtc catcatcgac accctccggg tgctcctgct 180
 acaggtggtc accacgccgc cattcttggg gatca 215

<210> 4407
 <211> 375
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-C9

<400> 4407

cacacgcgtc taccacgcg tccgccacg cgtccgccca cgcgtccgag cggctgcacg 60
 cggccttggt cttcgtgatg ggattctggc tgctggactt ttccaacaac acggtgcagg 120
 gccccgcacg cgcgtgatg gcggacctcg caggcagcca cggaccagc acggcgaacg 180
 ccatcttcgt gtcgtggatg gcgatcgga acatcctggg ctactcgtcg gggtcaccg 240
 acaagtggca cacctggttc ccgttcctgc agacgagggc atgctgcgag gcgtgcgcca 300

acctcaaggc cgccttctg gtgtcgggtg tgttctggg cctgtccacg gtggtgacca 360
tgatcttcgc ccgcg 375

<210> 4408
<211> 240
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-D11

<400> 4408

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aggagatcc tccacatcca gggcgggcag tgcgggaacc agatcggggc caagttctgg 120
gaggtgatct ggcagagca cgggatcgac gccacgggccc gctacgcggg ggactcagac 180
ctccagctcg agcgcgtcaa cgtctactac aacgaggcca gcggcgggccg ctctagagga 240

<210> 4409
<211> 334
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-D12

<400> 4409

tacaacatcc tatagtgagt cgtattagaa gagctggtcc agagcgcccg cccaaccatg 60
gcggcggcgg cgcccgtgcg cgcctgggtg gtggcgctgg cgctggtgct ggcgtgcgcg 120
ctgctctagc cggggccgtc cgacgcccg gggcagtcgc cccgcagtc gccggcgacg 180
gcggtgtcgt cggggcgccg caagcccaag tgcgtggccg gcgccaggaa cgaccaggcg 240
tgccgcgtcg gcgccgtgca cgacgcggac agccaggagg acgagggctc cagcgtcagc 300
atcgaagcgc ccgccgccgc actcgacgac gtcg 334

<210> 4410
<211> 329
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-D3

<400> 4410

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 cgaatcgaca ccatggccgc tgcgcgccgg ggcccgtggc gacagcacca acggcgtcgt 120
 ccgtccccgc ccccgcgacc gcggcgctcg cgcccgagc atggcggggc gcgtgggcgt 180
 cctcgcttc tgtgtcgag ggatctggc cgcctacatc taccaaggcg tcctccagga 240
 gactctatcg acgaagcggc tcgggccgga tgcgcggcgg ttcgagcacc tcgcgttct 300
 caacttcgag cagaacgtca tccgcttcg 329

<210> 4411
 <211> 253
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-D4

<400> 4411

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 cgtgctccag aacctgggtc agatctgcgt gttcagggc gccaatggga ctgcagggc 120
 gtggatgtgg tgggactacg tgcacgactt cgctgtgagg tgcccgatga aggagaagaa 180
 gtacacgcgt gagtgtgcga acggtgttat caattcactt ggactggaca ttgagaaaat 240
 caacaagtgt gtt 253

<210> 4412
 <211> 314
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-D5

<400> 4412

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 cgctcgccgc gcgcgcggcg gcgggtggcg tggcgggagg ggcccgctcg gtgccggcgg 180
 gtccgctgga catcgcgag ctgggcgcca agggcgacgg caagtcggac agcaccgccg 240
 tgatctcaa ggcgtggaag aacgcgtgcg aggcgacggg ggtacagaag atcgatcatc 300
 cgccgggcaa ctac 314

<210> 4413
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-D6

<400> 4413

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gggtcgaccc acgcgtccag gatcactatc tcgctcgcca gggcactctc tctctcgctc   60
actcacaccg tgctgttctt cgtttgtgtg cgctcgaag agctcctcc gttccctctc   120
cctcgaccga tcggccggtc tcacggggca tttcgggcg ctggtcgac tctccgcgct   180
cattctgtca acggattggt cggttgccga ttccgtgcgg ccggataact cggatttatt   240
cagtttttcg ggttcgctac atgcgtgtgc gatgccgggc agctccctca cggcgtccca   300
cgacgccacc ggcgacattg gcgccgcgct cgagctcgat ctgatgatt tcaccgccag   360
cggcggcacc gactgcatcg tggcgctcgc ct                                     392

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<210> 4414
 <211> 325
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-026-Q1-E1-D7

<400> 4414

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cacggagagg acaacctttc tgtaccaag tgctgtcgac caatttagga agcaatttgc   120
tcattctgaa gaaaatagtg gaaacggacc tgtgattcca atggaaagaa aacatacttc   180
tcttcctagg tctactattg ttcactcatc tccaattcct gtcaaggaac aaccccgat   240
cggcccatgt anggaaaggc cttcatctga tgagtcctaa aggaatcctc gggagacagg   300
acaatatcc gggaatctcc ccaaa                                     325

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<210> 4415
 <211> 388
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-D8

<400> 4415

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ggcacggaga ggacaacctt tctgtaccca agtgctgtcg accaatttag gaaccaattt 120
gctcatcttg aagaaaatag tggcaacgga cctgtgattc caatggaaag aaagcatact 180
tctcactcta ggtctactat tgttcaactc tcaccaattc ctgtcaagga acaaccccg 240
atcggaccat gtatggaaat gccttcatct gatgagtcct acaggaatcc tcgggagaca 300
gaacaatatt cctggaatct ccgccagaac gtcacaggct ccagaaagag tgccaacagt 360
cagaccagta aagggttttt ggccaata 388

<210> 4416

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-E11

<400> 4416

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gctagcaacc aaccaagaa agacaccata cccatggctc gcgctagcgt cgtcttcgtc 120
gttctgtctc tctcttcgt cgccatggtt gtggcaccga tggccgaggc aaagtccgct 180
gatgccccct ccgccgatgc ccccgcccc gctgctgacg cacctgccga tggacctagc 240
ggaccggcag gtgcacctgg tccccagggc gtcgaggac tatcgggcaa tgaggacgac 300
gacgatgact ccaccaacta aggccaagca cgtcgggtccg attgcatttg gaacaagata 360
tgaaagaaaa gtgagagcaa tgttgtttta aacaaaaaat ccataataat g 411

<210> 4417

<211> 372

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-026-Q1-E1-E12

<400> 4417

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tacgagcagc aagcagagat cagatcatcc atcggcaatg tcgaacatcg ggcagtcctt 120
ccaggccggc aaggcggang gcccagggcg agtacaggcg gagcacgccg cgcagtgcgt 180
caaagacacc gccggagccg cggccgacag cgcgcacctg cagcagcacc gcgccaccgg 240
cacggttgac caggtggcg aaacggggcca gggcggtggcg gcaggcgta aggacacggt 300
ggcggggccg gcggttgcg tcaccaaac ggtggcgcc ttggcgcg gcgtcacgaa 360
cacggtgacc cg 372

<210> 4418
<211> 292
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-E5

<400> 4418

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gtacgccatc ggcggcagca agggcccccac catcatcagc cagggaacc gctacatcgc 120
gccgccaac cttgccgga agcaggtcac caagcagcat gacacgccg agtccgtgtg 180
gaagaactgg gtgtggcact ccgagaacga cctcttcatg gagggcgct acttcaccgt 240
caccggcggc cagatcaaca gacagttcaa caagaaggac ctcatcaagc cc 292

<210> 4419
<211> 302
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-E6

<400> 4419

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cgccatgcta gcggtggtcg ccgatgtcg caacgccggc cagccaagc ccctgacgcc 120
tggcggggcg gtggtacag acaaccacgg caagttcacg gccgggcccgt ggaaacctgc 180
ccacgcgacc ttctacggcg ggcgggacgg gtccggcacc acggcggggc cgtgcgggta 240
caaggacag cgcgagcagg ggtacggcgt gcagacggtg gctgtgagca cgggtgtgtt 300
tg 302

<210> 4420
 <211> 238
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-E8

 <400> 4420

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 tcatcatcga cgcgggcaac tagactgacg gagcgggactg ctgccgggcg ggtctgaacg 120
 tcctccatca gcgtttctca gcaccgcagt ctgctcggtg gcaggcacgg caatgcgtat 180
 gaatgggaac cggctaggaa tccagaacgt gcatacgtg accatcagag gcgacggc 238

<210> 4421
 <211> 389
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-E9

 <400> 4421

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 agttgagcgc gacgatggga tccctcgcta ataacatcat ggtcgtgggt gtcgtccttg 120
 cagcgtcgtc cgccggcggg tcatgcgggc ccccggaagg gccgcccggg cccaacatca 180
 ccaccaacta caacggcaag tggtcaccg ccagggccac ctggtacggg cagcccaacg 240
 gtgccggcgc tcctgacaac ggcggtgctg gcgggatcaa gaacgtgaac ctgccaccct 300
 acagcggcat gacggcgtgc ggcaacgtcc ccatcttcaa ggacggcaag ggctgcggct 360
 catgctacga ggtgagatgc aagggaataa 389

<210> 4422
 <211> 339
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-F10

 <400> 4422

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atcgtgttct tcagcaccgg ctagctaatt ccctccctcc cagccatgat gacgccggac 120
atcacggggc acgggtatcc gctgcccag tttggggagt gggacgtgaa gaatccggtc 180
acctccgacg gcttcaccgt catattccag aaggcccgcg actacaagaa gaccaccacc 240
ggccctgggg ctgggaacgc gcgcgcaagc attccgcagg ctttcacgaa cggtggctgc 300
gacggcggct acatgcccga cttcggcgac ggcaaccag 339

<210> 4423
<211> 338
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-F12

<400> 4423

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aggtgttct cctcctccga ctcagcatgg tcgccgtcgt cctggctgcc atcgccacag 120
tagtgctcgc ggaggaagcc gatccgcggg cactgccggc acagtggacc accggaaga 180
agtacaaggc cacgatggac gccaagacgc ggcaggcttt cgacggcgtg gtggccgccg 240
ctacggcaga gaagcggctc caggcgggtg aggccgtgct gcagcagcag ctgaacatgg 300
acgtgtccct gtccaaggcg acgtcttccg gggacgag 338

<210> 4424
<211> 294
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-F5

<400> 4424

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agtgcaaagg cctgcgacgg tttgagttgc agtgtggtct gtcattgctc aggagctgcc 120
tcgacggtgg caagaactgg catctcgtgc agcagatccc cgaggctcgc atcataagct 180
gcatggcaa gagatacttt cggataaaca agagccgccg catctacgaa actaatgcac 240
agtcagaaga atgaagccat ttctgaaaac cttggcacga cactggtttg tttt 294

<210> 4425
 <211> 344
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-F6

 <400> 4425

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 cctcgacggt ggcaataact ggcattctgt gcagcagata ccggagggtgc gcatcataag 180
 ctgcgagggc aagagatact ttcagtataa cagcagccga cgcattctacg aaactaatgc 240
 acagtcagaa gaatgaagcc atttctgaaa accttggcac gacactgggt tgttttgggt 300
 catccacacg tttcagttgt cgctgtccct accttgggtcc cgga 344

<210> 4426
 <211> 281
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-F8

 <400> 4426

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 tgatgtgtgg agtaccatgg ctgactcgtc agagtatgtg agagctcata actaggccag 120
 gcataaaatg tggactcatc ttcattgaatg attttcattc gcgatttgag cgtatatcgc 180
 attttaattt gttttgaact gtcattgtac gtcatttatg acgttcaacc gtttagtcat 240
 cacgtatata attcatgtat cgagatatag gggatttcgg g 281

<210> 4427
 <211> 375
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-F9

 <400> 4427

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 cgcgcgacat ggtgatcgag ctctgccagg agctcatcgt gagcagcgac aagaccatcg 120

acggg'gcgcg agcgcaggtg cacatcgtgg gcgcgcagat cacgctgcag aacgtgcgca 180
acgtgatacct ccacaacctg cacgtccacg acgccgcggc gcacggcggc ggcgcgatcc 240
gggactcgca gcaccactgg ggcgtgcgcg gggagagcga cggcgacggc gtctccgtga 300
tgggggtccag cgatatctgg atcgaccacc tgtccatgag cagctgcgcg gacgggctgg 360
tggacgcggt ggacg 375

<210> 4428
<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-G11

<400> 4428

tccccgggtcg acacacgcct ctaccacacac ttctggcaac cctacagcgg catgacggcg 60
tgcgggaacg tccccatctt caaggacggc aagggtgcg gctcatgcta cgaggtgaga 120
tgcaaggaaa aacctgagtg ctcgggcaat ccagtcacgg tgtacatcac tgacatgaac 180
tacgagccta tcgtcccta ccacttcgac ttgagcggca aggccttcgg ctccctggca 240
aagcccgggc tcaacgacaa gattcgccac tgcggcatca tggacgtcga gttcagaagg 300
gtgcgatgca agtaccgccg cgggcagaag atcgtgttcc acatcgagaa gggctgcaac 360
cccaactacc tggcgtgct ggtg 384

<210> 4429
<211> 193
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-G12

<400> 4429

gatccacgcg tccaaaataa atcataataa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaaaaaa aagaaaaaaaa aaaaaaaaaa gggagaaaat acaaaaaaag ggcggcctct 120
ctataggttc aacgctaacg tactcctaca ggggagttta aacccttct agagtacccc 180
ctgaattcaa tta 193

<210> 4430
 <211> 377
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-026-Q1-E1-G2

 <400> 4430

 cgggtcgacg cacgcgtcca cccacacgtc cggcttaatt gcgccactgc tcgttatcct 60
 cctcttgcac tgcattgcag gtcgtagttg agcagcagca accactgcac aggatgtcgt 120
 ggcagacgta cgtcgatgag cacctcatgt gcgagatcga nggccaccac ctgagctctg 180
 ccgccatagt cggccacgac ggcgcggttt gggcccagag caccgcattc ccacagttca 240
 agccagagga gatgaccaac atcattaagg acttcgacga gcctggggttt ctggccccga 300
 tcggcctctt ccttggcccc accaagtaca tggatcatcca aggcgaaccc ggcgctgtca 360
 tccccgggaa aaaagga 377

<210> 4431
 <211> 330
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-G5

 <400> 4431

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 cgccaagccc ctgacgcctg gcgggcgctg ggtacaccac aaccacggca agttcacggc 120
 cgggcccgtg aaacccgccc acgcgacctt ctacggcggg cgggacgggt ccggcaccac 180
 ggcgggcgcg tgcgggtaca aggacacgcg cgcgcagggg tatggcgtgc agacgggtggc 240
 cgtgagcact tcgacctcag catgcccgcg ttcctccaga tcgcgagga gaaggccggc 300
 atcgtgccca tctcctaccg caaggtggcg 330

<210> 4432
 <211> 331
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-026-Q1-E1-G7

<400> 4432

gtcgacacac gcgtctacat tcaactctttc tagccacggc aaaacacctt cgccggcgag 60

agcatggcga tggcgtagcg tgtcctggag gtcaccctgg tgtcggcaaa tgacctcaag 120

aaagtgtcgc tcttctcccg gactcgcatc tacgccgtgg cttccatctc cggattcgac 180

ctccgcatcc ctccccacag caccgaagca gaccacagca acggctgcaa cccctgctgg 240

aacgccgtgg tacacttccc catcccggtt gccgctgaca cccgcggcct cgcactccac 300

gtgaggctcc gcgcccagcg tctatacctg g 331

<210> 4433

<211> 222

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-G8

<400> 4433

ccgggtcgac ccacgcgtcc actgcttcat actctcgtag agagatcccc gcggcccaat 60

aaaaacccga ctcgctagct gactacaca ctgcgagatg gccggcctca ggatgaagtt 120

cgtcgcgcgc gccgccatgg ccgccgcgct cgtggcgctc gccgcagccg ccgaggcccc 180

cgccccggcc cccgcctccg acgccgcggc cgctctagag ga 222

<210> 4434

<211> 385

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-G9

<400> 4434

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gtcacagctg cgggtgctctt ctacatcctc gccgttgctg ccttcagcgc ggccgaggcc 120

ccggcagagt caccgaagga aggcagtgtt gccgaaggac ctgagtctgc caagagaact 180

gctgcccccg ctgaagcacc cgaagccgca tccacccccg tcgccgccgc tgccccatcg 240

ccgtcgtcta ggaagtctgg tccagctacc gcgccagcca gcgcctctac acccccttct 300

tccacggacc aagaattgag ccttcccccg ccagcatcca ccgacgcggc gtcccctgcg 360

gctgagggac cggtctgctga tgact

385

<210> 4435

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-H10

<400> 4435

caacactcta tagtgactcg tattatcctc cattgaccaa caattaagcc tccccgaccg 60

ccacatctat taggtgcagc catgggtgcc tgtgcaacga agcctaagac gcttgagggg 120

aaagccccag ctgaggccac catctccaca cccaaggttg cacctgagac cactaccatc 180

cacattgagg ttgcggcaaa acatgcagta gttgagaagg tggaggagga caaggaggag 240

gcactaacag tggcggcgaa acaagagcca gcagccacca ttgagcctca gcagattgct 300

agtgaggtga ccacttcgga agtggcggtc gtcgttgtcg agcctgagaa caaagagga 359

<210> 4436

<211> 299

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-H5

<400> 4436

gtcgacacac gcgtctagac tcattagcgc gccggactcg cgcgtcatct tcgccgacac 60

ctacctctcc aagaccatcc agccggccgg ctggacaacc ataggctaca gcggcatcac 120

cgacaagggtg acgctcgagg agttcaactg cactgggccc ggcgctgacg tgacgaaccg 180

cgtgccatgg tcgcggagggt tctctctcga cgacgcagcc aagtacctca ccatcgactt 240

catcaactgc aaggactggc tgccggcgta ctactactga tccgacgac gactgctgg 299

<210> 4437

<211> 349

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-H7

<400> 4437

gggtcgaccc acgcgtccac cgatccatct tgggcgggcy cgcgcgctcg agggccagcc 60
 aaagcttgcc atggcgggcg tccggtccga caggggtccac caccaccacc gccgctccga 120
 ggcgtcgtgt ccggcaacct ccgcggccgt ggcgggcgcy agggccgatg acgccctgcy 180
 ccagcgcccc cggggggctcg tgcaggtccg ggagcgggac cagggccccg tgtcgacggg 240
 gcaccagcac ctgcaccacc atcaccacca gctgcggcgcy tcggcgggct tcccccccg 300
 ccgcccgggg ccggggcgcc gccctcctca gcgctgcgaa agcgacctc 349

<210> 4438

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-026-Q1-E1-H9

<400> 4438

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 gcccggggac agccccaaca cggatggcat ccacatgggc gactcatccg ggatcaccat 120
 caccaacacc gtcattggcg tcggcgacga ctgcatctcc atcgcccccg ggacctccaa 180
 ggtgaacatc accgacgtga cctgcggccc tggccacggc atcagcatcg gaagcctagg 240
 gcggtacaag gacgagaagg acgtcacgga catcaacgtc aaggattgca ctcttaagaa 300
 gacgatgttc ggcgtccgca tcaaggcgta cgaggacgcc gcctccgtgc tcaccgtctc 360
 caagatccac tacgagaata tcaaga 386

<210> 4439

<211> 340

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-A3

<400> 4439

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 gctaataaca tcatggtcgt ggggtgctgc cttgcagcgc tcgtcgcccg cgggtcatgc 120
 gggcgggcga aggtgccgcc cgggtcccaac atcaccacca actacaacgg caagtggctc 180
 accgccaggg ccacctggtg cggtcagccc aacgggtgcc ggcgctcctg acaacggcgg 240

tgcgtgcggg atcaagaacg tggacctgcg accctacagc ggaatgacgg cgtgcgggaa 300
cgtcccatc ttcaaggagg gcaagggctg cggctcatgc 340

<210> 4440

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-A7

<400> 4440

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tcgctaataa catcatggtc gtgggtgtcg tccttgacgc gtcgctcgcc ggcggtcat 120
gcgggccccc gaaggtgccc cccggtccca acatcaccac caactacaac ggcaagtggc 180
tcaccgccag ggccacctgg tacggtcagc ccaacgggtgc cggcgctcct gacaacggcg 240
gtgcgtgcgg gatcaagaac gtgaacctgc caccctacag cggcatgacg gcgtgcggca 300
acgtcccat cttcaaggac ggcaagggct gcggtcatg ctacgaggtg agatgcaagg 360
aaaaacctga gtgtccggc aatccagtca cgggtgtacat cactgacatg aactacgagc 420
ctatcgctcc c 431

<210> 4441

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-A8

<400> 4441

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gacgccgca gaaggtactt ccaccagctc gtcggcgccg tcgacttctg ccacagccgc 120
ggcgtctacc accgcgacct caagcccag aacctcctcg tcgacgagca cggcaacctc 180
aaggtctccg acttcggcct cagcgcgctc agggagtgcc agaagcagga cggcctgctg 240
cacaccacct gcggcaccac cgcgtacgtc gcgccggaga tcatcaacaa gaagggctac 300
gacggggcca aggccgacat ctggtcctgc ggcgtcatcc tcttcgtgct cctcgccggc 360
tacctccgt tccacgacgc caacctggtg gagatgtacc gcaagatcag cagagcccac 420

gtcaagtacc cgc

433

<210> 4442

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-A9

<400> 4442

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tcttgcagcg gacgcaataa cctgccggaa attcgccgag cgggcttaca agtacagacc 120
actcaaagtt gttgagtttg atcggcccta cccacagtgc atagcatact tggatctcaa 180
gcgcgacgag tgctctcgac tctttcctgc agggcggata tactcgcaag cgttccacct 240
tgcagggcag ggtttcttcc tctcggctca ctgtaacatg gagcagcaaa gcgcgttcta 300
ctgcttcggg ctcttctcgg ggatgcaaga gaagggtcc acgagtgtga cagtggacta 360
cgagttcgct gcaaggacga g 381

<210> 4443

<211> 388

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-027-Q1-E1-B1

<400> 4443

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cttactggca agaccatcac tcttgagggtg gagtcttcag ataccattga caatgtcaag 120
gccaagatcc aggacaagga gggcatcccg ccggaccagc agcgtcttat ctttgccggc 180
aagcagctgg aggatggacg cacccttgcg gattacaaca ttcagaagga gagcaccctc 240
cacctggtgc tgcgcctcag gggaggaatg cagatcttcg tgaagacatt gacaggcaag 300
accatcacct tggaggttga gagtcccgac accattgata atgtgaaggc caaatccag 360
gacaaggang gtatcccccc ggaccagc 388

<210> 4444

<211> 381

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-027-Q1-E1-B10
 <400> 4444
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 ggtggtctcg accccattcc gcttgggttac cacgaacatc tatgggatgg cggtgatggc 120
 cgtcgggggtg tactgcgcga gcaggtatgc agctgatatt ggcaaccgcc gtgatgtggt 180
 gaaaatggaa gtcgaggacc tgacggccgg actggccagc ggcaggatat gtgctgtgga 240
 gaacatcgcc cagctggtgg ctccggaggc agaaggcccg gccgatgcca cggccacggc 300
 cacgctggct gcttaacggg ccattgtgcc attattgctg cgacagagat gtgcgtcagc 360
 caacatgtgt gctgttgttt t 381

<210> 4445
 <211> 323
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-027-Q1-E1-B11
 <400> 4445
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 cgcacctctc ccacgtggc cgcaccgca atggggtgcg ccgcgtttgc cgccaacggg 120
 gccggggccc gggcggcggg ggtggcccg ccccggtgcg cggtaaacca agggttcact 180
 cggctctgccg cgcgccgccg ccgccgagg gagcgcgga gtcgtcgtcc cggggcaaga 240
 ggcgaaggcg caaggtggcg ccggaacca aggagccggc ggaggaagg accgccgcgc 300
 tgccgccgat gcccggctcg ccc 323

<210> 4446
 <211> 390
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-027-Q1-E1-B2
 <400> 4446
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ttccagccat ccttcatcgg gatggaagct gccggcatcc acgagaccac ctacaactcc 120
atcatgaagt gcgacgtgga tattaggaag gacctgtacg gcaacatcgt cctctccggt 180
ggcaccacca tgttccctgg gatcgtgac aggatgagca aggagatcac tgccttggct 240
cccagcagca tgaagatcaa ggtggtcgct cctccagaga ggaagtacag tgtctggatc 300
ggaggatcca tcctggcatc cctcagcacc ttccagcaga tgtggatcgc caaggccgag 360
tacgacgagt ccggcccatc catcgtccac 390

<210> 4447

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-B4

<400> 4447

cgggccgacc cacgcgtcaa cacgaatctg ccatcctctc caacacgaag atggcggttca 60
tcagcaatgt cgcagtgaag gcggcgccg tggccgcgct gctgctggtc gcagcgggtgt 120
cgcttcccgc gcgcgcggcg gcggtggcgg tggcgggagg ggcgcgctcg gtgccggcgg 180
gtccgctgga catcgcgcag ctgggcgcca agggcgacgg caagtcggac agcaccccga 240
tgatcctcaa ggcgtggaag aacgcgtgcg aggcgacggg ggtacagaag atcgtcatcc 300
cgccgggcaa ctacctgacg ggcgggctgg agctgaaggg cccctgcaag tcctccatca 360
tcatccgtct cgacggcaac ctgctcggca ccggcgacct c 401

<210> 4448

<211> 332

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-B6

<400> 4448

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cgatgacaag ttccggcatc gcaagtcgtg gctcacctcc agtcgcggcg gcagctccag 120
ctgcgacgac ggctgcatcg acctgcccac caacggcgac aacgacgacg tcatcaactt 180
catcctcgac ttcgacaaac tgcaccgcgt caggctggac cgcatcacc acgcatgcgg 240

ctgcatgtgc gcaagcatcg tcatgcgaca ctccatcggc ggaacgctct cctacagcgc 300
 agtcggggttc tgcggaggtt tcgcagacgc at 332

<210> 4449
 <211> 392
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-027-Q1-E1-B8

<400> 4449

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 ataatggccc gtgcatgctg gttcctcgtc gtgctcctcc tggccgcat cgcggtggca 120
 ccgttcgcgg ggcgcgcacg cgtggacgtt gtggagggta ggtccatggc atccgccgat 180
 gcaccggagg cggcggccga tgctcccgtc cctagccccg actccgcctc atcnccagac 240
 tcgtcatcgg aggcgcctc tagcagcagt tcctccgact agacgcanaa acctcttcat 300
 tctctggaat aactaacagt atatacgttg caccctgatg atatagaaac atgtacgtgc 360
 atcagtgtat ggaatgagag tgggaaacac at 392

<210> 4450
 <211> 376
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-B9

<400> 4450

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 tcacgcaaga tggcgtgaca ttatcgttct accctgggtt actgggtggc agcgggggag 120
 tgggtcatct aggtattcgc gttgcgggac gtacgcctca tgagcgtagc catcctgcag 180
 ggggggagat ttcaggtttc acctggaacg cgcacgcacc gtctggtagg tgaagcagca 240
 gatcaggaag gaacagcccg cgtcggcgcg ccccgacgta gcaagagggc gtgctcgagg 300
 gtgaggacct cgacgacagc cacctcatcc agtatatgtg cacggcttag ggcggcgtga 360
 gagacagtga cgggtg 376

<210> 4451
 <211> 361
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-C1

 <400> 4451

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 tggagtgcaa gcacttcggc accggcaagc tcgatcgctc catccacggg gtgacccacc 120
 ggaacggcac atacacgatc caactcatgg acagccacga ggaggacatc ggctaagtgg 180
 tcttgggtgga gagcccgcac aaggactgca gaccaggtag atgccgacag ggaccgcgcc 240
 ggcatcatgc tcaccatgaa cgtcggcatt aacgagcttc tgcgctcctg gaaaagtctc 300
 gggtaactca aggacttgcc actgatcatc tacgcatccc tgctcaaaca gttggactca 360
 g 361

<210> 4452
 <211> 296
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-C2

 <400> 4452

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 tcctaagcgg atgcatcgct cacacgagag cgcagggtga tgaccacagt tgcgacgagt 120
 agttgatcaa tagcctcatg tagggctaga cctgacttga cgggttcgtg accaacgtca 180
 ccgaggtaga tccccgacac gaatgtgacg cagggtgtgca tgcacgtcag ctgaggcaac 240
 ctcgagcgcg tcatctacgg tgatcatgat gccagtggta tctacacgat gtaact 296

<210> 4453
 <211> 331
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-C3

 <400> 4453

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 tacacattac attacacact tgctgcttca cttcactata ggactatgtc tcgcctcttc 120
 ttgatgttca ttggctcggc accagccgtc cctttectca tcatcgccac aaactctgaa 180
 taatctatcc ttccatcatt gtcagagtcg gcatcggaga tgatgtcttt gattttatcg 240
 gcgtcatata acccttgctc cttcaaggcg tgc tcaagct cttctttagt aatgtacccg 300
 ctgttgctct tgtcgaaata ctggaatgct g 331

<210> 4454

<211> 417

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-027-Q1-E1-C6

<400> 4454

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 tcaactgtcgc agacggcctc gcaactcgac tcgccactga tcaaccagaa ctaccgcgtt 120
 ctgaaccaga tgcagggtgt ccaccacctc ggccggcagtc agcagccgtc gttccaccag 180
 gacggcagcg cggcggcgtt cggcgacatc gtctcctctc gcctgccgcc actgccaaacc 240
 gccagaacgc aggcggagct acattcgaac caattcgaca cctccagcag cggcgggctg 300
 ctggatcagt cgatgctgat cggcgacgaa cacctgctgc ggcccaacc gagtatggtc 360
 aaggctctct ccatgcncgc gctctcttac cgtgaggcgg atgggtccag gatgctg 417

<210> 4455

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-C8

<400> 4455

cgggccgacc cacgcgtcca ctgatgtacc atcaaacacg gtgttgacag catcaaagaa 60
 gatgctggaa ctaaaaatga gttcagcagt tgtagcaatc gaaagcaaac ctgggggaat 120
 tctgacatct agagatatcc tgatgcgtgt tategcccaa aatcttctc ctgagtccac 180
 tacagtcgag aaggatcatga ctcagtgtcc tgaatgtgcc tcggtagaca cccaattct 240

tgatgctctt cacacaatgc atgatggaaa atttttacat ttgcctgttc tggacaggga 300
 tggaaatggt gtgactgttg ttgatgttct tcacataacg catgctgcaa ttgctacggg 360
 tggaaacagc ggggcagctg gatctgagtc aacgtctgcc atg 403

<210> 4456
 <211> 336
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-D1

<400> 4456

ttcgcggggc gaccacgcg tccacaaatg tcattctagg acctaggaag gcgaaagtgc 60
 tcagctgatt cggcactacc accaccagac aaactgaagc caattccgtt cagcgtgaag 120
 tgaaacgtta gcaattatag gatagtcagt gtcttactgt ctttaacctt gttgtttctc 180
 tatttccgct tctttttcta gtttacctta tggtagagtg gttttctagt ttcccgggtc 240
 atctagatag gaaaaagcgc ttggagggaa gaatccatgg ccgacatcta tttaaccttt 300
 tcaccttggt actaagataa tggagtattt tcgaga 336

<210> 4457
 <211> 389
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-D11

<400> 4457

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 gaaaatgcaa aagatcttgt gaggaagatg cttgatccaa gccctactg tcggttgact 180
 gccagcagg ttctagaaca tccctggata cagaatgcca gtgcagctcc caacatccca 240
 cttggagaag cagtgaggtc caggctgaag caattcactg ttatgaacaa gttcaagaag 300
 aaggccctgc ttgtggtggc agagtaccta ccagccgaag agctggaagc aatcagggag 360
 ttgtttcagt tgctggacac gaacaagga 389

<210> 4458
 <211> 334
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-D2

 <400> 4458

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 acggccaccg gaaagaaaat gtcgcgcgct acatctgcgg tcctcttcta catcctcgcc 120
 gtcgactgat ctcagcgcgg cctacgtacc ggaagagtca ctatggcagg tagtcgtgca 180
 aaggcaccgg tcgagtgcaa taatgcacga agtcctgcag actcttggca cagcacacga 240
 ctctgttgca attaaaactg cacgcgctaa cggacatcat gccggatcta gaccagccgt 300
 tgcagctgcc ccatcgtcgt ctctgtctag gaag 334

<210> 4459
 <211> 326
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-D3

 <400> 4459

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 ccagcctctc ctgcccccggt ttctgttgcc gtttcttcat tagcgcgaac aaagttttgt 180
 gccggtctat cggccgcgcg tttcctcacc tattcatcaa gactgcaata actgtcgcta 240
 cctatgcttc tcacctgtga ttttttggac acaatatgtt aaggtccatt caattctaata 300
 gagacgcctg atgaggctac tagcat 326

<210> 4460
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-027-Q1-E1-D4

 <400> 4460

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 gatccgcagt gcggggcacgg ggcagatgcc agtcggcaag agaaggagcg attgccgcgg 240
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 cgggagtcga atcgtgtcg gatctagccc cccccggccg cgcgtggccc gctgcgctcg 360
 ccgcgcgaca tggcccgggc ccccggccga cggacggggc cgcgcgcctt tgaatgattg 420
 aatccggccc gccaaagcca 440

<210> 4461

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-D5

<400> 4461

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 aataaaaactc tcgccgccgc catccgagcg aacaagccaa ccgaccccgt cccaaggca 120
 atccgccgcc gacgtaccac caccaccgca ggagcgagat ggagatgaag aggatcctct 180
 tcgccgtcct cgtcgtcctc gccgcctcgg ccaccgcagt gctggcctcc accgaggcgg 240
 ccgccgcggg cgcccaact gcctccgagt cgtccgccga ggctcccgtt ggcgtggcg 300
 ctggcgctgc cgctggcgcc gccgccgcgg ggcctccgc cagcagcggc gcgccgccc 360
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 gtgcgtg 427

<210> 4462

<211> 442

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-032-Q1-E1-D4

<400> 4462

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 gcgacgacct tcgccgtcat cttatccgtc ctcttctgtg ccgcggtctg caccgccgtc 180
 gacaacgacc tccccgacta cgtcatccag ggccgcgtct attgcgacac ctgccgcgcc 240
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 cacttcggca ccggcaagct cgagcgctcc atcgacgggg tgaccgacgg gaacggcacg 360
 tacacgatcg agctcaagga cagccacgag gaggacatct gcgaggtggt cttggtggag 420
 agccccgcga aggacntgcg ac 442

<210> 4463

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-D6

<400> 4463

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 ggtcatcctc tacgcgagcg ggccgcttct cccatccagc cgcgcgcggc gtcgccggaa 120
 ccggagaagg gaggggaagg agcgcgagat ggacaaggcc aataagctca gcaccggagc 180
 gggggagaag gcgaccaaga gcaggagcca cgggtccacg gcgctgttcg tcgcggtgga 240
 ctacgcgttc ctgctcgtct tcgccggctt cctcgcttac ctgctcgggt cgcggatcct 300
 cgctccgcc gccggctccg cctagaccgg cccgcgttcg tggatctctc ttctttcttc 360
 cacgtttttt tggagtcgat ggctgccgga gcaccgggat cttgccgggt 410

<210> 4464

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-D7

<400> 4464

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 ctgagggacc ggcggctgct gatgcctccg gtgctgctac ccttgaagc ggagctgcca 180

tcgctggtgt cgccgctgct gtcgctacca tgatcttcta ctgagttcac cagggaccgt 240
 gtcgtcgagg gtgggcaagt agttggctgt gcgtaattg ctgctctggt cgggagggac 300
 aaataacgca agtggttgett ttgcttgctc acttcgtgtg ctcttgtaac tttatggggg 360
 caaccgttat ataactgaaa cgatttgatt aattgatact aatgctctct aag 413

<210> 4465

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-D8

<400> 4465

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 ccgaaaacgg ggtgacaatg gcggggaacg acggcgactc gcggctgttc gtcgacctgg 180
 agccccgttc ggccatcagc aagcggcacg gcggcagcgt cggcggcgac cagcggcgcc 240
 cgtgcgccag ggctaggacc atgtccacca gttcaagga gccgccttgt gtcgccgaac 300
 acctccctct ctctggcccc gtgcagctcg cggcgctcac cggcttctcc tgggccaaga 360
 agccccggcc cgacgccacg acggcggcgg taactgtgac gatgcggagc ggctccatgg 420
 ggcc 424

<210> 4466

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-D9

<400> 4466

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 tgagcggcgc gactatttcc gcgccatgca ggccaaggat ctgttccggc acgagcagat 120
 gatcacgatg atgggcagcg accggaacgg cagcagcagg aggcggcggg cgaaggagtc 180
 gtccaagctg ccggaggtca tgtccgccac gtccatgttc gagctgccga tgcggagcgc 240
 gctgaacatc gcgcacgtgg gcatgtacct ggtgtcgggt cgcacgcgca cgccggcgct 300

gccgtacaac ctggttttgg acaccgccac cgacctgacg tggatcaact gtcgtctgcg 360
 gcgccgcaag ggcaagcact atgggcgaca gtcgatgggg cagacgatgt cgggtgggcgg 420
 ggaaggcgcg acggcggcga agaa 444

<210> 4467

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-E10

<400> 4467

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 ggcgagggcg agatccagtc ggagtaccgc tacgacacca ccgaggtcgt cccgccgggg 180
 aatggcgggcg gcgcgggggtg ggtggtgcgc ccaaagtccg tcacctataa cttcaagacc 240
 agcaccaacg tcccaaagct gggggtgatg ctcgctcgat ggggcggcaa caacgggacg 300
 acgctcacgg ccgggggtgat cgccaacagg gaacggattt cgtgggagac taaagagaaa 360
 gttcacaagg ccaactacct cggctccctg a 391

<210> 4468

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-E11

<400> 4468

ggtctagaac tcccgggtcg acccacgcgt ccgttggcgt cggtgacgac tgcattctcca 60
 tcggcccccg gacctccaag gtgaacatca ccggcgtgac ctgcggccct ggccacggca 120
 tcagcatcgg cagcctaggg cgggtacaagg acgagaagga cgtcacggac atcaacgtca 180
 aggattgcac tcttaacaag acgatgttcg gcgtccgcat caaagcgtac gaggacgccg 240
 cctccgtgct caccgtctcc aagatccact acgagaatat caagatggat gactcagcca 300
 accccatctt catcgacatg aagtactgcc ccaacaagtt gtgtactgcc aacgggcgct 360
 ccaaggtcac cgtcaaggat gtcaccttca agaacatcac cggcacctcc tccaccccg 419

<210> 4469
 <211> 449
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-032-Q1-E1-E3

<400> 4469

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ctgaattact tcgggatggc gtatcactgg agcaaatagg tcttgatddd tctccagaac 120
tcactgaaac aactgctcca gattccatcc ggatgcttgt tcaaacagtt ctctcagata 180
agaaaccaga agaaattcaa tcagttgtag aatcactctt gagcaaagta attaataaac 240
ttgagcaccg tattgcaagc cagagtgaat tgggtgaaaga nactatggat accaacggct 300
gtaactcagt tttgagaatg gagtctccct gtaacaacaa tgacagtaaa tcattatcca 360
gagtggaccc tccacaagtg gagttgactt cctgcagtga tctggagaag gtgaaagaaa 420
ctatggatac caatggctgt aactcagtt 449
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<210> 4470
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-E4

<400> 4470

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aggacagcag caccaaggtg gaacagccgg cggacagctc cttgaagccg gcgagcctga 180
acgcgttcga catcatctcc cactccagag ggttcgacct gtcaagcctg ttcgaggtgg 240
accaagagca gaaggccagc aactcgcggt tcatgacca gaaaccggcg tcggcgatag 300
tgtcaaagct ggagcagatc gctgagacag agcgcttcat ggtgaagaaa caggacgggc 360
tgggtgaagct gcaagggtcc aaacaaggga ggaaggggca gctcgcgatc gacgccgaga 420
tcttcg 426
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<210> 4471
 <211> 415
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-032-Q1-E1-E6

 <400> 4471

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 cgccggagaa gacagctatc cccatggacc gaaggtccat gacacctggt atcagctcta 180
 gggtatcctc accaccacca gccgtccatc cctcaccacc accagccgcc gcgccatcag 240
 ccgccgcaac gccctcccac ctgccctctc caactctaga tgcattcact cggtctaaag 300
 agagttttgg ccgcttcgca gagcagtggg atcagttcgt tgtgatgttc caccgctaca 360
 aggagaagac agagaaggaa ctccaagcag cgggtgcggct tcagacgaca acgcg 415

<210> 4472
 <211> 417
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-032-Q1-E1-E8

 <400> 4472

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 tggctcctctt ctgcatcgtg catggtgaga aggaagagtc aaagggcatc gatgcgaaag 120
 cgtccggggc tgggtgggtcc ttcgacatca ccaagttggg cgctccggc aatggcaaga 180
 cagacagcac gaaggctgtg caggaggcat gggcatcggc gtgcggcggc actgggaagc 240
 agacaatcct catacccaag ggcgacttcc ttgtcggaca actcaacttc acaggccctt 300
 gcaagggcga cgtgaccatc caggtggatg gcaatctgct ggcgaccacg gacctaagcc 360
 agtacaagga ccatggtaat tggatcgaga ttctacgcgt ggataacctg gtcatca 417

<210> 4473
 <211> 435
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-032-Q1-E1-E9

<400> 4473

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tattcagata cactgcatcg gttttggaag aaagagcatg attaggggtg ttaaaagttt 120
atggagctgt cagaattaca tgatggcttt attgttcagg attctcttac catcaaagcc 180
caagttcaag tcattagaag atagaccgtc catttcgttg ccttgatggc cagtaccgaa 240
gggaactaat tagggtgtat ctatcaaagtg tggaacaaat ttatcgggtg tttattgatg 300
aaaaagaagg acgttcagca ggctgattga ggataaactc gggcgggtcca gtttcagtgg 360
attctggcta gccatttttc atctttgatt ttatctgaac agagacttga actcgctatc 420
aactttcagt agacc 435

<210> 4474

<211> 383

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-F10

<400> 4474

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ttgtttcagt tgctggacac gaacaaggat gggcatctta caatcgaaga actcaggaag 120
ggaatgcgat tgataggcca caatgtccat gacactgacg tcgatatgct catggaagct 180
gccgacatcg acgggaacgg gaccctggac tgcaaggagt tcgtgacagt ctccattcac 240
ctgaagaaaa tccgtagcga ggatcacctg cccaagggtg tcagctactt cgacaagaac 300
gggagcgggt acatcgagat cgaagagctg aaggaggccc tctctccaag aggtgaccag 360
aaggcgatcg aggacataat cct 383

<210> 4475

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-F11

<400> 4475

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gggtcgtgcg cggattccca gggcgggcg gatttactg ccatggcgac ggcgaacgag 240
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gagaatctct cgactttggt gtagatcgaa agggaagcac ggctgtccca tatatacccc 360
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ccttggcttc aattc 435

<210> 4476
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-F12

<400> 4476

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ttggtgcggc gccggccgcc gcgaacgcgc ccggcggggc gttcagcaac tgggtggcga 180
tgaaccagca gagctacgcg ctgtacgcgc agaagtccgt cggggacggg ggcaaggagc 240
ccctggacaa gaagctgtcg gaggcggaga agaagaaggt cacgtacgtg gtggacccca 300
gcggaaggcg cgactacacc aacatcacgc cggcgctgga ggatatcccg gtgagcaaca 360
ccaagcgctg gatcctggat ctcaagcccc gcgctcagtt ccgcgagaag ctgttcctga 420
acatc 425

<210> 4477
<211> 428
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-F2

<400> 4477

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ggtgttcgcc gcggtgtcgc ctgccgcgcg cgcggtggcg gcggaggcgg aggcgaaggc 120

gaaggctgtg ggaggcgcgc cgtcgggtgcc cgctgggtcgc ctggacatcg cgcagctggg 180
cgccaagggc gacggcaagt cggacagcac cccgatgggtg ctcaaggcgt ggaagcacgc 240
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gctggacctg gtggggccct gcaagtcttc catcatcatc cgcctcgacg gcaacctgct 360
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cctgtcca 428

<210> 4478
<211> 432
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-032-Q1-E1-F3
<400> 4478

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cggagcgctt cggcgggtcgc ggctagccag acgatggcca tgatcaatag gctgcangan 360
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ggacacgacc ac 432

<210> 4479
<211> 448
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-032-Q1-E1-F4
<400> 4479

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ctcctcctct cctcctcgt ctccgccgcg gccagtgcgc ggaccgtggg cgacaccgtg 180
caggacgcgt gcagcaagac ccagttcccc aagatctgcg tggacagcct cgccgccaaag 240
ccggagagcc agaaggcgac gccgcgcaag ctggcggagc tgttcgtgaa catcgcggcc 300
gagaagggat ccgggatggg caccttcgtg caccgcaagt acagcgacaa ggaggacagc 360
gacatattca agtgctacga cagctgctcc gacgacgtgg aggaggccgt cgcccacctc 420
aacggcctcg tccgggagcc caccgacg 448

<210> 4480

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-F6

<400> 4480

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ttggcttagt cttgctctta gtacaatgga gctgagtcaa atggtgacac aaggcatgtg 180
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ccaggaaaat gaaggggaagc ccatcgagag tatctttgat ctagctgaga tggctgtcga 300
tgagatgcgg gatctcttac aactatcgaa ctctcagctg caagacatca ttgaattcat 360
caagcggttc cccaatgttg atatgaccta tgaggctcgt gaggggtgatg atata 415

<210> 4481

<211> 68

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-F7

<400> 4481

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atcagcgc 68

<210> 4482

<211> 450

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-F8

<400> 4482

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ctgcttctac tactggcggc ggcgtcgaca gcgacggcgc atttcacggt cggcgatgtg 180

gatgagtacg tgtccaagcg cacgcaggag tcccgccaca ggaacaacgg tggcgcgggc 240

atcgatgacc tcattctccag tgcggcgcgcc ttccacgcc aagtggatgc acgcgcctat 300

ggccgtagat ccgacctgca ggaggaggca acagctaccg taataaccaa agcggaagca 360

caagaggctt cagctgaagg tggcgattaa cctacctaac catattattt attcattcat 420

atgcattcat ccttggtgct atgccagcca 450

<210> 4483

<211> 392

<212> DNA

<213> Zea mays

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<400> 4483

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cggaaatcaa ggctgcaccc tcattcaggaa ccacagcagc agcaaccaca agtgcagggtg 180

gagctgcagc agcaaccaca agtgcagggtg gagctgcagc agccgcaacc aaaaaacaa 240

gcagcacctg ttatgcgcag aggagcatct attgctgctc ggcaagcagc aatggcacag 300

caatctctgg agactatacc cgttccatct tcaccaaga tcaagcgtca aacatcaggg 360

agacctggtt cggtggtatc cacaagcct gc 392

<210> 4484

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-G1

<400> 4484

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ccgccgcatt cacggatgga gatgaagaag atcgccctgcg ccgtcctcgt cgccgcctcg 180
gcggccaccg tggcgctcgc cgcggaggct ccggctccgg cccccaccag ccgctcctcc 240
gocgtcccgc cccgcgtcgg cgcgccttc gggggcgccg tcgcctcatt ctgcgctac 300
tacattcagt gagccgggcg gcgcgcccgg aggccagga agagactagg gggagagaga 360
gtgacatggc tgcgcccatt ccgatgcgtg ggcatgtttt ttgattcgac acaccttttg 420
tcctcttttt 430

<210> 4485

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-G10

<400> 4485

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tttcccgggg ggccggggga gagagaggca gaaggaggag gcacggagag gacgagacag 180
gatgctcggg ttcaggcaga tgccgtggtc gtcggcgag gagcaggagc aggcgccgtc 240
ggagcagctg tgcgaggggg tgtcgggcgt cgtggcgggc cgccagggga tggagaagcc 300
gctgacggct gtggcgaggc cgttcgagga gctggcgcg gcgatggagg ccgatggcgg 360
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<210> 4486

<211> 244

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-G11

<400> 4486

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cgtttcacgc gacagccgtc acgcgtcacg tatccaggct gaccgtagga gagacactca 120
tcttcaggac ggagggagac gactacacag gatgcacggg ttcaggcagc tgcagcgatc 180
gccagctcaa gagcaacatc aggcgccgtc ggatcagctg tacgcctggg gtgtcggaag 240
tcgt 244

<210> 4487

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-G12

<400> 4487

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accaggttct tgcattcctg tcagatccca ctgaaacagg tctgaagaga agcgctcgac 180
gtggtgcagg tctgtcatat tctgtggtgt agttcaagca taagccatta caggagggt 240
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aaggatgaca tgaataaacg ccgaagctac cgccagatcg atagcttcgg ctcatgatga 360
agatgaagta tgatggtgat gctgaccgaa ggggaaaaaa agactattta gtccttaata 420
atttgtatt 429

<210> 4488

<211> 307

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-G5

<400> 4488

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agccgatcac cagtgccacg gcagtccatg agatgggcgt cgtcgccacg ctccgcccg 180
ctgctaacgc cgtggtcccc gccgcagcac ctgtctacca ctgacggaac atctgtacta 240
ccatcgagtc gcctacgtcc acatgctggt ggagcatgtc ctgagctacc tcagccaacc 300

attggac

307

<210> 4489

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-G6

<400> 4489

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gcgggcgtgt ggtacacgac aaccacggca agttcacggc cgggccgtgg aaacccgccc 180
acgcgacctt ctacggcggg cgggacgggt ccggcaccac ggcgggcgcg tgcgggtaca 240
aggacacgcg cagcagggg tacggcgtgc agacggtggc cgtgagcacg gtgctgttcg 300
gtgacggcac ggctgcggc ggggtgctac aagtgcgggt cgtggacagc cctagcgggt 360
gcaagcccga cgcggcggca ctgggtggtga cggtgaccga cctgtg 406

<210> 4490

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-G7

<400> 4490

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cgccgatctc cggagccacg gcagtccttg tgatggccgt cgtcgccacg ctgcgcccg 180
cggctaacgc cctggcccc gccccagcac ctgctaccag tgacggaaca agtgtagacc 240
agggaatcgc ctacgtcctc atgctggtgg cgcttgctct cacctacctc atccacccat 300
tggacgcctc ctccgcctac aagcagctct tttaaaacca tccgctttgt aatttggcgc 360
caattgaggg tgtcattaac ggtgttcgat tagtaatcca tcc 403

<210> 4491

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-G8

<400> 4491

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gacgtgccgc cctccaacac ggccccacc aagatggcac ccaacgtcat cagcgccgag 120

ttccgcacgt tcattgaggt ggtcttcgag aaccccgaga agagcatcga caccatccac 180

atcgacggct acgccttctt cgccgtcggc atggggcccg gcaaattggac gccagcgctc 240

cggagtacgt acaacctcct ggacacgggtg agccggcaca cgattcaggt gtaccaagg 300

tcgtggacgg cggtgatgat gacgttcgac aacgcgggca tgtggagcgt ccgctccaac 360

atctgggaga tgcagttact cggcgaacag ctgtacgtaa gcgtc 405

<210> 4492

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-G9

<400> 4492

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cgcggggcccg cagaagtgtc cgggcgcggc gggcgagtgc gacgtggacg aggcggagga 180

tctcgggctg agcggcggcc gcctcggctc cgacgacgcg gtgcggcgga cgctggcgca 240

gcggaagccg accaaccggt acatcagcta cgcggcgctg cgcgcggaacc aggtgccgtg 300

caacaagcgc ggccggtcct actacagcaa ctgcgaggcg cagaaggccg ccaacccta 360

ccgccgcagc tgctccgcca tcacgcgctg cgcccgcaac at 402

<210> 4493

<211> 430

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-032-Q1-E1-H10

<400> 4493

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 ggccctgcagg tggggttcta tggaaagacg tgccccggcg ccgaaggcgt catcagcgac 180
 atcgtcaaca acgaaatcgc tatggaccgg ggcatctccc ctggcctcat tcgcctcttc 240
 ttccacgact gtttcacac gggttgcgac gcttccattc tcctggacga gtcgcccgcc 300
 ggcgacgtcc cagagaagga gtcgtccgcc aacggcttca ccctggtcgg gtcagaacc 360
 atcgacatcg ccaagtccac cgtanagggc atgtgccccg gcaaagtctc gtgcgcagac 420
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<210> 4494
 <211> 405
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-032-Q1-E1-H11

<400> 4494
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 tgtcctaaac tgaaagctct accagaaggc ctgaagcatg tagcgctgtg tgaacttcat 120
 gtggaggggtg cacatagcct aactgaaatc aaggacctgc caaaactatc tgacgagctc 180
 catctcaaag ataataaggt gctacagagg atctccaacc tgcccatgct tcgttccctc 240
 attatcgatg actgctcaaa gttgaagcat gtggcaggtc ttgatgctgt gcagcacctc 300
 agacttgtct ttctccgtc caccgagaca ttttatttcg aagagctagt aattttctgg 360
 agcgttgctt tcnacgggtg gctggagcta ctgattcaga agtgc 405

<210> 4495
 <211> 424
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-H12

<400> 4495
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 aagtcctcct ccgtctccac cggcgcaagc cacacctcca ccacgtcgcc gtcgtcctcc 240
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 gccgacgccc agaagcctat ctctgtcgac cccaaggcag acgccatcgt ggtgatggac 360
 gccaaagaaag aggagggcaa caacaagggtg gccgtggagg aggatctgct tcctgaatcc 420
 acca 424

<210> 4496
 <211> 423
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-032-Q1-E1-H4

<400> 4496

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 ggtccagctg ccgcgccgac caccgccgcc tctacaccgt cttcttccac ggacgaggag 180
 ttgagccctt cgccgtcggc atccaccgcc gaggtggcgt cccctgccgc tgatgggcct 240
 gctgagggac cggcggctgc tgatgcctcc ggtgctgcta cccttgaag cggagctgcc 300
 atcgctggtg tcgccgtgc tgtcgtacc atgatcttct actgagttca ccangggacg 360
 tgtcgtcgag ggtgggcacg ttattggctg tgcgggtaat gtcgtctgg tcgggaggga 420
 cca 423

<210> 4497
 <211> 282
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-H5

<400> 4497

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 agaggagac atcctcgccg ccattctgaac ttgcccgggc cgtctctaca ggcgcaacat 120

gccagccgca tctagtgatg ctgatgaagt tgattctgtg aggcgtctcc gacgacacca 180
 cctgcatcat gtgcgccgac gccgacgca tctgtacgtc ctccactata ggctcgtca 240
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<210> 4498

<211> 376

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-H6

<400> 4498

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 gcggccaccg cccacaggt agcggaggca aagaagaaga gagcggcgga gagcggcgag 180
 gcggcggagg cgaagaagat ccaggacgac ttctgctcga cgctgtgcga gggcaagaag 240
 gggacggacc tggtcgtgtg caaggagtcc tgcgcgctct ccagcagtc caacctggtg 300
 ctgtacggca ggatccagt caagggcaaa tgcaccgagc agaagggcat cacggcgccg 360
 gccatgaagg tctgcc 376

<210> 4499

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-H7

<400> 4499

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 catcctgacc acctcctctt atgccgcgct caacggcgctc ttgtactgca agatccactt 240
 cgcgacagctg ttcattggaga aggggagcta gaaccacatg aacaagaaga gcccgctca 300
 ggaggttctg ccggacgtgg ctgaccagga gcaaccgccg gaaccagcgc caccgcaaga 360
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<210> 4500
 <211> 428
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-H8

<400> 4500

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cacagaacct gacggcgacc gaggcggcgc ggcgggtgct ggagtcggcg gacctgctcg 180
cgccgcggaa gctggacgcc aaggaggagc tggagaagct gaacgaggcc ccggcgtcga 240
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aggacggcac gctggacgcc gacggcgagg ccatgctcct caagaaggcg cccagcgtgg 360
cgcccaagaa gttctcctac gtcgacagcc tctcctccgg cggcatgagg agcccctctg 420
cgcgccac 428
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<210> 4501
 <211> 371
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-032-Q1-E1-H9

<400> 4501

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cacaggtttt ccattagcct ctctgtctgc ctgtaaggt tactcaaccg gctgtacatg 120
ttgcaaagat cacctttag atgctctaca catgttgtca aataggaaac aaaaaaaaaat 180
taatataatta tcataccatt agagtattag aattgtttcc tagaaagaaa atagtatatc 240
agtatagttc attcgttcca acaactttta gtttcgggaa agaaacaatc aaattcattg 300
tttataagtg caaataatag gagtttcctt agttcaacac attttctttg gaatgaatat 360
acacctccca t 371
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<210> 4502
 <211> 453

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-033-Q1-E1-A1

 <400> 4502

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 ttccaagtat gccactccct gggtgggcgc actgggttctg gcatgggcac gctgctcatc 180
 tccaagatcc gggaggagta cccagaccgc atgatgctga ctttctccgt gttcccgctc 240
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 gtggagaacg ccgacgagtg catggtcctt gacaacgagg cgctctatga tatttgcttc 360
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<210> 4503
 <211> 427
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-033-Q1-E1-A11

 <400> 4503

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 agcggacatt gttgatgaag ccataacttt ctttcgagcc aatgttttct tcaaaaattt 360
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 cttaaaa 427

<210> 4504
 <211> 420
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-033-Q1-E1-A2

<400> 4504

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caagtggagc cggaggcccg aggcgtcgcg cagcceaacc agccccctcgt gcacgaggcc 180
gccgtcgcgc tcaccaactg accggaccgg cgggcgttcc ccgtcgactg tgttcgatcg 240
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cataagctgc gccgccgtgt cgtcgggtcg tgcaccgcgc agtagtgtgc gtacagcgga 360
agctgcgact gcgagcgagg tanggtgttg ggggtgtgac tgggtaccag gagtggggta 420

<210> 4505
<211> 466
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-A5

<400> 4505

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gcaagcccac ccgttcgacg acatggcccg cctcggcgcc ggcgccgtgt tggcgctcct 180
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gtacatcagc tacgcggcgc tgcgcgcggg acaggtgccg tgcaac 466

<210> 4506
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-A6

<400> 4506

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acgttcgcga cctcacatgg cggatttgag gacttgtgga gcatggggat tgctcgccga 180

cgtcgtgtag tctggggcat tccgccgtgc gccgtgggtca gggcaccagt gcgcataatc 240

caagcagtga ggacacgtgt catctgaaga tcctcctggt acctagaatc tcaagtecca 300

ggtcagaaca agttacggca ggatgatcct catggaaaat gctgcaataa tttcttaatt 360

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taatta 426

<210> 4507

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-A7

<400> 4507

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cacctccggc ccgtccctca acatcctcat caagctcatg gccgtggagt ccctcgtgtt 180

tgcccccttc tttgccaccc aggggtggcct gctcttcaag tacctgtaaa agggacaaca 240

ccaagcacac agcagaagta tacgatctcc cgaccgaccg tggacaatat cgaataactc 300

ctgccaatc gccagttcct tttgtgtact gtgcgctagc cgccgcctag ctgcactgct 360

gtatttttgt ttcaggattg ctgctgctgt tcgcattcaa tctttgggcc tcccggagcc 420

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<210> 4508

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-A8

<400> 4508

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cctcgctgcc gcggcggtcc tggcgctccg cgccgcgtcg ggcgtcaacg tcggccagtt 180
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gccccagccg tacaacgtca ccaacagctt caacgccgcc gtccacagag ctgtcagcag 300
cagtcggcgt gagatgcggg agaggccgag gaagcacaag aagaggggcc catgccgggc 360
gacgaaccct atcgacaagt gctggcgctg ccgcaggacg tgggcgacgg accggcagcg 420
cctg 424

<210> 4509
<211> 405
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-033-Q1-E1-B10
<400> 4509

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tgaatatttt tcccaaacag atgaaatcca tataatccca agaattcatg taatggaaac 180
catgtttgat gtggattcaa agccaaaatt tcataagctt caagaagttg aaaccaagga 240
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<210> 4510
<211> 83
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-033-Q1-E1-B11
<400> 4510

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agtgtggcaa ggctcgtcatc gtc 83

<210> 4511
 <211> 424
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-033-Q1-E1-B12

<400> 4511

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 agttcaagac cgaggacatg gccaacatca tgaaggactt cgacgagcca gggcacctcg 240
 cgccgacagg cctgttcctc ggacctacca agtacatggt catccaaggc gagcctgggtg 300
 ccgtcatccg tggcaagaag ggatcaggag gcatcaccgt gaagaagaca gggcaggcac 360
 tcgtggttgg catctacgac gagccgatga cgctgngca gtgcaacatg gtggtggaaa 420
 ggct 424

<210> 4512
 <211> 421
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-038-Q1-E1-D5

<400> 4512

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 ggaagggtcaa actggttggtg gaaacctcac cggggtgctt caacgaacgc gaagggtgctg 240
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 attgagctcg aggatgatga aatgggggct cagcagcggc acgcccgcgg attcctacta 360
 cgagggtacgg tcagattgca cggacggtgt gcccaagagc aagttcaaga tcaaggctgg 420
 c 421

<210> 4513
 <211> 424
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-038-Q1-E1-D6

 <400> 4513

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 accaccggca ccagttagct cacctcccc gccaatcccc gtgagctcag cccccccatt 120
 tgcaaaatcc ccaccgccac agttcaaatac acctgcacca ccaacttcga gaagatctcc 180
 acctccaccg gtgaagcccc cgccaccacc gccacttgta agctctccac cactgccacc 240
 aatgacctcc ccacctccac caacaccggc gagctcaccg cctcctccag tgagggtcccc 300
 tctccaccg gcgccaataa actctccacc cccaccggtc aaatccccac caccacctgc 360
 tccagtgagc tcgccacctc caccagccat ctcatcacca cctccaccgg caccatcatc 420
 accg 424

<210> 4514
 <211> 420
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-038-Q1-E1-D8

 <400> 4514

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 ccgcagcatc gccatgctga gcgccgggca ggacgggata ccaatgcaca gcctctggct 120
 ctgcaagctc ttcttcgcgc tggcgctcgc gctcagcgtg ttccgggagg tggccatgtg 180
 gaagcgctgg cgtgtggcac actacattcc gagcatcatc tgtgtggcca tcgcctttgt 240
 ggtgccggcg cgcataccca tcgacatgtt cgtcgggagc ttggtgctgt acctgtggag 300
 gcgtgccgac cctagcaagg cgccgacgtt ctcgatggcg gtggcgctcag ggatgatctg 360
 tggggacggg ctanggatgc tcttgtcatc cacgatggca ctcatgcatg cgcgggcgcc 420

<210> 4515
 <211> 420
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-E1

<400> 4515

acattcccta tagtgagtcg tattaacgt cggatcctt gactccaag gggatttaca 60

cgcatagcag gatcagctaa acttcctgtt ggtgttcttg agccgaaggt tgaatacaga 120

ccttttgctc attctgcggg gaacttctct gagtgtagat ctgcagcact aacactactg 180

caaaaaggaa atgaggggatg tacatatcat gaatgccgcc ttggagcagc atttgtacca 240

taattggaag ggaaattttt ggcgacagaa aacttttacc atacttcaaa gttcttttgg 300

ctgagttcga agcccttctt ttctgatctg atggtggctg gggagaaatt ttgccatggg 360

gattggtcaa agattaaaaa taagtacagt tcctttgatg acggacaact gcttcttttt 420

<210> 4516

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-E10

<400> 4516

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tcaacatcct cgcggggctg actatcacc tgcaggtggt ctctgctgac atcaacgaca 120

acgtcggcgt cactctacac gacaaggagg gcatttctcc agacaagcag ctctcaatt 180

gtgccaggat gcacctgac gacagtcaca cggtagacaa ctacaacatt cagctggata 240

gcacgcgcca catgcagctg cttctcaaga gccggatgca catcatcatc aacactctgg 300

tgcactcgac taacaccctt gatgtcgtct ctgctgatat caatgataat gtcggcgtca 360

ctctggacga ccaggagggc atttctgccg accagcagc 399

<210> 4517

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-E11

<400> 4517

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tcaagtcgta cgaggatgcc gagtctgtgc tcacggcgtc ccatctcacc ttcgagaaca 120
tcaggatgga ggaggtggcc aaccccatca tcatcgacca gtacttctgc cccagaagg 180
tctgccccgg caagcgaagc aactcctcgc atgtctccat caagaacgtc accttccgca 240
acatctccgg cagtcgtcc acgcccgaag cgcgcagcct gctctgctcc gagacgcagc 300
cgtgcagcgg cgtctcgctc atcgatgtca acgtcgagta cgccggcaag aacaacaaga 360
ccatggctgt gtgcagcaac gccaaaggaa ccgccaaggg aaa 403

<210> 4518

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-E12

<400> 4518

ccacgcgtcc accacgcgtc cgctcccccg ccggccaaca actcagccgc cgcaaccgcc 60
acatcagcca tgggcgctg cgcaaccaag cccaagacgc ttgaggggca ggccccagct 120
gaggccgcgg tctccacacc caaggttgcg cccgaggcca ctccaatctc cgttgaggtt 180
gcggtgatg aacaggtagc tgagaaggtg gtggtggagg agccggctgc ggcggccgac 240
gttgagcatc agaaggctaa tgaggtggtc gctccagagg cggccgtcgc cgagcccgat 300
cacaaggagg aggaagccgt ggagaagacc gtcgtcgagg aggagaagcc agcggcagcc 360
gccaatgcag aggaaaaggt cgccaccgcc gccg 394

<210> 4519

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-E3

<400> 4519

cacgcgtccg cgctctgtcg cccttcgttc acctctcctt cctctcgtcc ctgcctgcca 60
gggagagggg aagtcagagg cacggagtgg cgcagagcag acgcccgtga accattgtag 120
ctgtccctgt cgtcgtcgtc gtcaacgaac ccacacaagg aaaggatgga gaagaagccg 180

accatcctca tgaacaggta cgagctcggg cgcacgctcg ggcagggcac cttcgccaag 240
gtgtaccacg gccggaacct cgcgtccggc gagagcgtgg ccatcaaggt catcgacaag 300
gagaagggtga tgcgcgtcgg catgatcgac cagatcaagc gcgagatctc cgtcatgcgc 360
ctcgtccgcc accccaacgt cgtgcagctg cagcaggtga tggccagcaa gagcaagata 420
tacttc 426

<210> 4520
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-E6

<400> 4520

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atccacatgg ggcactcatc cgggatcacg atcaccaaca ccgtcattgg cgtcgggtgac 120
gactgcatct ccatcggccc cgggacctcc aagggtgaaca tcaccggcgt gacctgcggc 180
cctggccacg gcatcagcat cggcagccta gggcgggtaca aggacgagaa ggacgtcacg 240
gacatcaacg tcaaggattg cactcttaag aagacgatgt tcggcgtccg catcaaggcg 300
tacgaggacg ccgcctccgt gtcaccgtc tccaagatcc actacgagaa tatcaagatg 360
gaggactcag ccaaccccat cttcatcgac atgaagtact gcccacaacaa gttgtgtact 420
gccaacggcg cct 433

<210> 4521
<211> 397
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-E7

<400> 4521

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aggctgatat tcataagatt caggcagagc ttgtgtcatg tcttccgtcg ttacctcacc 120
tttcagatct acaaaagctg aaggatgagc tgaagacctc ttggaattct atggaggttc 180
ttccatctct gtcccgttgg catctcttgg agttactcgc aaattgtctg ccacacagat 240

ttacccatcc caatgaaaca agtttgtctg ttcttcaaag catgaaggag gatctagcaa 300
gcctgattgc accgcaactg attagaccaa ttgcgcggtg gccattctat gccttcttgg 360
gaggagccat gttctgcctc ctggccagca tcaacttg 397

<210> 4522

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-E8

<400> 4522

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gaaagggtccc gcccttttcc tccgacatcc acaagggggg aggggaaaac acgtacattc 120
acccggcggc aataatggcc tcggttccgg ctccggcgac gacgaccgcc gccgtcatcc 180
tatgcctatg cgtcgtcctc tctgtgccg cggtgacga cccgaacctc cccgactacg 240
tcatccaggg ccgcgtgtac tgcgacacct gccgcgccgg gtctcgtgacc aacgtcaccg 300
agtacatcgc gggcgccaag gtgaggctgg agtgcaagca cttcggcacc ggcaagctcg 360
agcgcgccat cgacggggtc accgacgcga ccggcaccta cagatcgag ctcaaggaca 420
g 421

<210> 4523

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-F1

<400> 4523

cgggtcgacc cacgcgtccg catcgacggg gtgaccgacg ggaacggcac gtacacgac 60
gagctcaagg acagccacga ggaggacatc tgcgagggtg tcttggtgga gagcccgcgc 120
aaggactgcy accaggtgca ggcggacagg gaccgcgccg gcgtcctgct caccaggaac 180
gtcggcatca gcgacaacct gcgccccgcc aaccgcctcg gctacctcaa ggacgtgccg 240
ctgcccattc gcgcctcgtc gctcaaacag ttggactcgg acgacgacga cgatcagtaa 300
tagcacatcg acgacgacga tcgatatgta atagcacgtc gtcgacgacc gaccgcagtc 360

gtcgcagact ggctggcact aaaccacaaa tcctcttcac ctggattaca aatatgtaac 420
tgagaaagga aagga 435

<210> 4524

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-F10

<400> 4524

ccacgcgtcc aaatctgcc tctctccat cacgaagatg gcgttcatca gcaatgtcgc 60
agtgaaggcg gcgggcgtgg ccgcgctgct tgtggtcgca gtgggtgcgc ctgccgcgcg 120
cgcgggcgcg gtggcggtgg cgggaggggc gccgtcgggt cgggcgggtc cgctggacat 180
cgcgcgagctg ggcgccaagg gcgacggcaa gtcggacagc accccgatga tcctcaaggc 240
gtggaagaac gcgtgcgagg cgacgggggt acagaagatc gtcatcccgc cgggcaacta 300
cctgacgggc gggctggagc tgaaggggcc ctgcaagtcc tccatcatca tccgtctcga 360
cggcaacctg ctcggcaccg gcgacctcag cgcgtaccaa aggaactgga tcgag 415

<210> 4525

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-F11

<400> 4525

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tctgggatct cattttactg aaacaccttc acagtatcca gcacaaaatg ggaaactgca 120
ccataagtct atggagggtta ttccattggg atttggtttt gaagatgata ctctcgtgta 180
agcatctgac agctcagtag aacctcactt gcaacatccg ccatgtaaca acattcttga 240
tgtcaatcgg cttcttgatt cagttttgga aacatctcag catggttgga ggctcgtcagt 300
gtcaacaaac caggatctgc ctttcaagga cgtagccaac caatgtgaag cacttctgat 360
tggaagcag caaaagctat ctgcgtgcat gagtgtctgt taaaa 405

<210> 4526

<211> 405
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-038-Q1-E1-F12

 <400> 4526

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 ctagctagat agcatgtata taagcccgtg cgcgtggtgc ctttcctctc atcaccatcg 120
 cctggaacca cagaccacaa aggaggggac acacacacac acacaccgtc tccgcccggc 180
 cgccgcgacg cgccatggct atggctcgct ccgtcgcgca cctcttcttt cccatcctcc 240
 ttatctccac cgcgcccggc gtgcggggcca tcaccgacgc cgccggcggc cccggatacc 300
 tccaggaggc gtgcaacaag acgctgttcc ccaagggtgtg catgcacgcg ctcaaggaca 360
 acccagagtg ccaggcggag acggcgggtca cgccgcgccc gctgg 405

<210> 4527
 <211> 448
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-038-Q1-E1-F2

 <400> 4527

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 tatacctagc agtgtctctg catagaaaga taaaaggtag gaggaggcgc agtgcgtggt 120
 gggattatct gtgaggagat attggagtta ttatatatat atatataagg agacgataga 180
 tagacagcta gatctatata accatggtgg atgggttccg atggatcaga ccgggctctt 240
 tcgtcctgta cttggtcttc ttcttctgtt ccgcagccct gtcggaggcc aatatcggcg 300
 acttcgatga atactggcag cagcgcaagc tcattggcca cgccgcggct gatgccacgt 360
 acaagcatga cccggtcgag gtcgccaacc aacttaaccg tgcagtccac agatccgtcg 420
 agaaggagga cattggcacg aggcggga 448

<210> 4528
 <211> 445
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-F5

<400> 4528

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gagcgcagag ggccgtcacc tgggtccgctc gccgttgtgt ccattcgggg caaacacaga 120
gacctcggga gcctgccgca cctccatcga gcggaacgga agaatggtgg gagaacagag 180
aaactccacc gccatggccc ggcgccgcgc ctctctgtgt gcactggtac cgctgccatg 240
tgccgtgcag tgcgttgggtg ggatcctgtc gtcgtggtgg gaatccagcg gccctgggta 300
attcgggtgt gcgcccacat ttggcctcgg tgaccagcta caggattccg ccgacatctc 360
cagtgcaaat catgtggtca ttccgggtgg attgatgccg ggggaccctg ggattgttca 420
ccggaaaatc tacacagcgg caaag 445

<210> 4529

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-F6

<400> 4529

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acaaggggtc gacgttccac aggatcatcc cggggttcat gatccaggga ggcgacttca 120
ccaacggcaa cggcacgggg ggcgagtcca tctacggcag caccatcttc tccgacgaga 180
acttcaagca caccacgct aaagccggta cgctgtccat ggctaactac gggcccgaact 240
ccaatggctc ccagttcttc atcaccaccg tagacgaaaa ccggttgccc aagaagctgg 300
acgggcgcca cgtggtgttc ggcaagggtg tgaaagggat ggacgtcgtg cgcaagatcg 360
aagccgaggg ccagctcacc ggcgtgccca aggccaaagg cgtcatagcc aac 413

<210> 4530

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-F8

<400> 4530

ccacgcgtcc ggttcgacat caagtccggc acgtccatgg ccgcgccgca cctgagcggg 60
 atcgccgcgc tgatcaagca cgcgaccccg acctggtcgc ccgcggtcac caaatcggcc 120
 ctgatgacga cggcggagcc taacgacaac ctccggaagc cgatccagga cgtcaacggc 180
 aggccggcga acttggtcgc cattggcgcc ggccacgtga acccgaagaa ggccatggac 240
 cctggcctcg tgtacaacat gacggccatg ggctacgtgc cgtacctgtg cgggctcaac 300
 tacacggacg acaaggtgag cacgatcatc taccgggagc cgccggtgtc gtgcgccaag 360
 ctgtcaaggc tcgaacagga cgacctcaac taccgtcca tcagcgtcat cctcaaccag 420

<210> 4531

<211> 446

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-038-Q1-E1-G1

<400> 4531

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 cccgcccccg ccccccccc tacgagcacg acggcctccg gatgagggtc ctgccgcgtc 120
 ttttaccgtc agctggatgt caaatcacao cgcgccctgt gacatcccca agccggcctc 180
 cgtcgacgag ttcttcgcca agaattggcaa gaagaagaag tccttcatgt cgggcctctt 240
 ccgcaagaaa gggaggggcg cggacaagaa gctgctctcg cggcgggaca tcgtcttcga 300
 tttggaaggc agaagcggcg acaggatgga cctcttgag acgtccgccg ctgtccgcaa 360
 gagcttctca gatcggcact gcacgacgcg gatcgagaac ctgacgctga gctgcctgga 420
 ttctcncagg agaccaatg tcgaca 446

<210> 4532

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-G10

<400> 4532

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 tcaattgcaa gaggagcaag ataccaccac cgtagcacca cagcaggta cgaagaaggc 120

gacgaacatg gcgaggctgg ccttggtagc ggcgggtggtt ctgtgccttc tattagcgac 180
 agggccgcag ggggccgtca ggcgcgaggg gatggtgtca ttgacaatt tgatcagctg 240
 caaggctactg ggcaactgcg ataagaacct gggccccgag gcctcccgcc cagggaacc 300
 cgccaacgac tacaccgcg gctgcaacct gatcacggc tgcgcggct gatcatact 360
 ctctggctga tgtgcgcga atgtcaatgt cgcacgcgcg tgcagggtacc aggccttagc 420
 gtgtggtg 428

<210> 4533
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-G11

<400> 4533
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 ccatcggtga ccatggattg aagacattga tcggcttctc tggagggtgc tgtgagcagc 120
 tcggagggtca gccgccgaga agagctcata ggcaatggca accgcaagga aggatcctca 180
 gcaggttgat aaagtcaacc tgaaaccag cgagtctggc aaaggggtag tacggcgtgc 240
 aaggtctgtc ccgacctctc cggatcgcag atcgteccca tccccggccc cagtctcaga 300
 caacgccagc cgaccggcat catcactcaa cactcgcacg acctcgctcc ggtccacaac 360
 aacatctagc tcggcggcct cttcaagcca cggaagacg atgcgctccg cttcgtcgt 419

<210> 4534
 <211> 400
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-G12

<400> 4534
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 gggtgacgcc gtcgtccaca ctctcagcta accagtgcct gggccgcggt tggccacggt 120
 gggcgaccct ggtggttcac cgggtgactg cgaatctagg cgggtcttcc tggggctcga 180
 tctgggtctc atggttggt aatttctcac cggagcattt gggggacggg ccgtgcgcct 240

ccaattttctc gccgtcgacg tgtttctccgc cgcgggacta cagcgtgcca tgggcgggac 300
tccctgggagc ttaatccgcg cgcgaggtca cgagtcacct gaagatcatc ctggtacctg 360
gaatctcaag tcccaggtca agagcaggta ccacaggatg 400

<210> 4535
<211> 320
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-038-Q1-E1-G2
<400> 4535

gggtcgacgc acgcgtccgg gatgactcgc aacatccaat aagaggcagc cagagaaact 60
aataaaactc tcaccgccgc gatccgagag aacaagccag ccgaccccg tccccaggca 120
atccgtcgcc gacgtaccac cgccagcgca agagcgagat ggagatgaat aggatactct 180
tcgccgtcct cgtcgtcatc gccgcctcgg tcaacgcagt gctggtctcc accgaggccg 240
ccgccgcggg cgcaccaact gcccccgagt cgtcgagccg atgctccgc tggcgctggc 300
gctgcgcgca gccgctggcg 320

<210> 4536
<211> 335
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-038-Q1-E1-G3
<400> 4536

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gccactgaaa gctgccgcgc gcgcgcgcgc gccgaccggt ggaccatgcg tgcatagaaga 120
agaatgcagg ggggtgggctt gggcctgtaa cctgttaatg gatcggattc tcggtgccaa 180
ttcgtgatct tgaccggtct aagaagatgg ggacttgctt ctttgtttca ttggttatta 240
tttctactag tgtgtatatg gtaaagtcgt gtgctgtgaa cctgcgatca tttatcctct 300
gttcattgaa ttgaagcaat cccctctccc gtcac 335

<210> 4537
<211> 419

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-038-Q1-E1-G5

 <400> 4537

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 cttcaggaac accatgtggt ggaggaacgt caagctcaca gctgcagtga tattcatcct 120
 caccgtaatt gtgtacgtcc tgctcgcta catgtgtcgc ggcttcacca taccgtcatg 180
 ctttcogtaa tctccatccg tcccgggtgcc agtgcggaacc accagcccta gctctagctg 240
 cgtcacaact tggttttccg ggttctgtaa cagcagcagc ggtgctgcag ttctttctct 300
 cttgtacgag ggaaacaaca gctcattctg aagtctgca acaaccagat ctgatttttt 360
 ttaaaaaaaaa agatggtagt caaatgggaa agctttccca cctgattttt tatcattaa 419

<210> 4538
 <211> 189
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-038-Q1-E1-G6

 <400> 4538

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 ctaatcacta gtataaagca tgcggagaca gccggcccct ctggcctcgc tgctccccct 120
 tctccccgt cccacccat atgccctgac tacgaacctc ggcgcctcgc gcaatctgag 180
 ttcacccac 189

<210> 4539
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-038-Q1-E1-G7

 <400> 4539

 ccacgcgtcc gggaagacgt gcaggtgacg ggggtgcacga tcgccggcac cacgaacggc 60
 ctgcgcatca agtcgtacga ggactccaag tcgtcgctca aggccagcaa gttcctgtac 120
 gagggcatca ccatggacaa tgtctcctac cccatcatca tcgaccagaa gtactgcccc 180

aacaacatct gcgtcaagtc cggcgccctcc aaggtggccg tcaacgacgt cgtcttcaag 240
aacatccacg gcacctccaa cacgcccggag gccatcacgc tcaactgcgc caacaacctg 300
ccatgccagg gcgtgcagct cgtcaacgtc gacatcaagt acaatggatc cggcaacaag 360
accatggccg tctgcaagaa tgccatcggc aagtccatcg gcttggcaaa ggagctggcg 420
t 421

<210> 4540
<211> 392
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-G9

<400> 4540

ccacgcgtcc gccacgcgt ccgatcacga caagatggcg tgcacaaaca atgcgatgag 60
agccttggtc ctctggtcc tcttctgcat cgtgcatggt gagaaggaag agtcaaagg 120
catcgatgcg aaagcgctccg ggcttggtgg gtccttcgac atcaccaagt tgggcgcctc 180
cggcaatggc aagacagaca gcacgaaggc tgtgcaggag gcatgggcat cggcgtgcgg 240
cggcactggg aagcagacaa tcctcatacc caagggtgac ttccttgctg gacaactcaa 300
cttcacaggc ccttgcaagg gcgacgtgac catccagggt gatggcaatc tgctggcgac 360
cacggaccta agccagtaca aggacatgg ta 392

<210> 4541
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-H10

<400> 4541

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catggcggca acgacgacgg ggatgcagat gatgcaggcg gcggcggttc tgctgtgctt 120
ggttggttg gcggcgctca cgcgggtcgc gctgggcaac tgccgcgacg actgcatggc 180
tgcatgcaac ggctggacca tcgtctgcca gctctcctgt gccagcgcat gctacggaga 240
agtcgggatc acaaccttag gtacgtcggc tgtattagcg aaagcagaag cgctgcatc 300

agcaccacaa gcagcacaag agcgaggcgc cgccgccggc gtgtccgcgc tcagaggggt 360
 caagctatca tcaccgacga cccgtggccg tggatgaatt aattaaggcc ccatgcatca 420
 tgcattg 426

<210> 4542
 <211> 427
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-038-Q1-E1-H12
 <400> 4542

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 gaagaaaaca gggcagtcac tcattcattgg catctacgac gagcccatga ctcccgggca 120
 gtgcaacctg gtgggtggaaa ggctgggcga ctacctgctc gaacagggga tgtaatgaca 180
 accccttccc ctggaatgca tgttgatgat gttgctgggt ccaacttcgt tttcagtaat 240
 aacaacaaag cgaagacct cctacctacc ctatttgctt gagcggctct tgtccgcgcc 300
 acaagatacc aattgttgcg ctgggaatat tcagttacga tgaccgcctt tagttcagtt 360
 tttttgtttt tggggttggt tcgatcattt ggctgtancg tgaatcgcat ggacaacaga 420
 ctccaat 427

<210> 4543
 <211> 434
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-038-Q1-E1-H2
 <400> 4543

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 tcagaatctt taattctcta cactgttctg agttacttta tgcactgttt catccatatt 180
 aaattaaatc ctgtgttggt cagataataa tagaaatcaa tacagttatt tgtatcctta 240
 gaatttgctc caaaatcttt tttttcaaca ttgataattg tatgtatact aaataaactc 300

gttcggggaa ggaatgactg ccctcccggg attatgctaa gaagagaccg aaaaacaatg 360
 gtcccgggag agaaacttcc cgaaccctga cccctatcat taacgagccg acgtcaaccg 420
 ttcactctgc aacg 434

<210> 4544

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-H3

<400> 4544

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 taacagcgac ggccatgcac caaaccacca cccacacat cattttcttt cttcctttct 180
 ttgattcga cgacgcctgt gattcatgca tgctctcgat cgaagcaaag ctgttgatg 240
 ttgttatggg gtactgtttt ttattattt ataaagtttt gataaaaaac atgtaaacia 300
 aacaatcaca tacatcattc aaggatacaa ggaactacag tatttgttat gtcct 355

<210> 4545

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-H5

<400> 4545

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 atgaagagcc gcagcatggc atcatcggcc gcgctcttgg tgctagccct cgcgctagt 120
 gcggccaccg cccacaggt agcggaggca aagaagaaga gagcggcgga gagcggcgag 180
 gcggcggagg cgaagaagat ccaggacgac ttctgctcga cgctgtgcga gggcaagaag 240
 gggacggacc tggctcgttg caaggagtcc tgcgcgctct cccagcaatc caacctggtg 300
 ctgtacggca ggatccagt caagggcaag tgcaccgagc agaaggcat cacggcgccg 360
 gccatgaagg tctgccagga ggagtgcgac aaggcgtacg tggatgaagg gccgaagtc 420
 acca 424

<210> 4546
 <211> 425
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-H6

<400> 4546

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ggaggcctgc gcggcgaggg cgttcgccgc ggcgccaac gcgacgggcg atggggcgac   180
ggtggtggcc gggaagctga acgtgcacct ggtgccgcac tcgcatgacg acgtcgggtg   240
gctcaagacc gtcgaccagt actatgtcgg atccaacaac agcatccagg gcgcgtgcgt   300
gatgaacacc ctcgactccg tggtcgacgc gctcgccagg gaccccgccc gcaagttcgt   360
cgtcgtcgag caggcttttt tccaaagggtg gtgggcagag aaaatcgcaa acattcaggc   420
agtag                                             425
```

<210> 4547
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-H7

<400> 4547

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catgatggcc gagatcgaca ccgacggcga cggtgcacg gacttcaacg agttcatcac   120
cttctgcaac gccaaaccgg ggctcatgaa ggacgtcgca aaggtcttct gatccattac   180
atcttcgtcc atacgataca atcgatgatg aacctgctta tatacacaca catgtaccat   240
tcagctccaa catatgattt cgatcagctt gcctgcctcg cctggcttaa tgctgtcctt   300
cgccttccta taagcactaa gctattatta ggattttggt ttatttaact tttttttgtc   360
tccaatctaa tatatgtgga cgttcttttt tattcatttt cccctatatt tggttcgat   419
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<210> 4548
 <211> 438
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-H8

<400> 4548

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cgccgttgct gccctcagcg cggccgagcg cccggcagag tcaccgaagg aaggcagtcg 180
tgccaaggca cctgaggctg ccaagagaac tgctgcccc gctgaagcac ccggagccgc 240
gtccaccccc gtgcgcgcgc ctgccccatc atcgtcgtct aggaagtctg gtccagctac 300
cgcgccagcc accgcctcta caccctctc ttccacggac gaggagtga gcccttcccc 360
gccagcatcc accgcgcgcg cgtcccctgc ggctgagggg cgggctgctg atgactccgc 420
cgggtgctgt gcccttgg 438

<210> 4549

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-038-Q1-E1-H9

<400> 4549

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atattgcccc agaaacacta gcgcgtcgga tcacaagcaa gggcgaaaat tttctgtggc 120
tccagcggct gaaggacgct gcggcaccca tgctggccat cgaccgatca ataaataaac 180
atggacagaa tcgaattggc aagcaggacg acactggtgg ccgcgctcta cccaagttcg 240
gcgagtggga cgtgaacaac ccggcgtccg cggacgggtt cacggtcac ttacgaagg 300
ccaggacga gaagaaagct ccccgaccc aaggccacat caggaacaac aggtcgggtg 360
cggctgacag caaggactcc agggccgaga agatgacctc ctacaacgcc aggaccaacg 420
cg 422

<210> 4550

<211> 309

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-A1

<400> 4550

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gccccatggc cgccatggct cgttccgtct ccttcgtcgt ggcgcccctt ctctctctct 120
ccctcctcgt ctccgccgcg gccagtgcgc ggaccgtggg cgacaccgtg caggacgcgt 180
gcagcaagac ccagttcccc aagatctgcg tggacagcct cgccgccaag ccggagagcc 240
agaaggcgac gccgcgcaag ctggcggagc tgttcgtgaa catcgcgggc gagaagggat 300
ccgggatgg 309

<210> 4551

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-A11

<400> 4551

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gggcgacggg ttctacggcg gcataaggaa gctccgcggc aaggatgaca tctccaagtg 120
gaggcagctg tggccaacag acgtcctgga gtaagcagga gccgcatccc ttctcacacc 180
gagattgac catcgctcaa atgacacgcc tttctttcat catattgacc aaattcgtcg 240
tctctgtcgc gctgttgtaa acgggttagc agaagaacac acagggtgac aacaaatcct 300
tgttcggtta tttctaatac atatggattg gatgagattg gaaaaaatta agaagaagtt 360
taacttgttt gcgattcaaa cacatccaat ctc 393

<210> 4552

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-A4

<400> 4552

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ccagccaaag cttgccatgg cggccgtccg gtccgacagg gtccaccacc accaccgccg 120

ctccgaggcg tcgtgtccgg caacctccgc ggccgtggcg gcggcgaggg ccgatgacgc 180
cctgcgccag cgcccgcggg ggctcgtgca ggtccgggag cgggaccagg gcccgctgtc 240
gacggggcac cagcacctgc accaccatca ccaccagctg cggcggtcgg cggcgttccc 300
accccgccgc ccggggccgg ggcgccgcc tcctcagcgc tgcgaaagcg acctcaacat 360
cagggagcac cgctcctgca gcgaggtggc cggcggcaac gcggccggct gcg 413

<210> 4553
<211> 361
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-A5

<400> 4553

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ggcaactgcc agcagatcca ctgcgtcgtc cgtaccggg agaactgat ggagggcacc 120
ccggggctga cctggaagat caccgtggac ggctggagcg atgagaagaa gaactaccac 180
tagaactcat acacctgcga ccccggaag atgtgcggcc actagaaagc cgtcgtctgg 240
aagaccacca ccagcgtcag ctgcggacgc atcaagtgca acagcggcga caccatcatc 300
atgtgcagct actggtcgtc ggggaactac gacggcggtta agccatacta gaatatatat 360
c 361

<210> 4554
<211> 408
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-A7

<400> 4554

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aatggtgaac ggcaaggcgt acagcttcga gaagatgcac tggcactcgc cgtccgacca 120
caccatcaac ggccagaggt tcccgtgga gctgcacctg gtccacagga gcgccgacgg 180
cgcgtggcc gtcateggga tcctctacca gctgggcgcc ccggactcct tctactacca 240
gctgaagcgg cagctgggcg acatggccaa ggaccgggtgc agcttcggcg aggaggagtc 300

gcacgagggc gtcgccctca tccacctgcg ctcgctgcag aagcgcaccg gcagctactt 360
ccggtacacg ggctccctca ccgtgccgcc ctgcaccgag aacgtcgt 408

<210> 4555
<211> 395
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-B11

<400> 4555

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gcgaggacac gtacctcccg gaggtcgtgc tcaacatccc gcacaaccgg tcaatggcca 120
gcgcgcgggga cgaggccgag atgggtcatgt tcggcgcgct ggacgagctg ttcgccagga 180
ccgggggtgcg gcccaaggag atcggcgtgc tgggtggtgaa ctgcagcctc ttcaactcga 240
caccgtcgct gtccgccatg gtcgtcaacc actacaggct ccggggcaac gtctcgagct 300
acaaccgctg cggcatgggc tgcagcgcggt ggatcatcgc cgtggatctc accagggacc 360
tgcgtcagtg ccagcggggc aactacaccg tgggtg 395

<210> 4556
<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-B12

<400> 4556

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caagctcaac aacagccagc tcgcgaaaat aatgaagagc cgcagcatgg catcatcggc 120
cgcgctcttg gtgctagccc tcgcgctagt ggcggccacc gcccacagg tagcggaggc 180
aaagaagaag agagcggcgg agagcggcga ggcggcggag gcgaagaaga tccaggacga 240
cttctgctcg acgctgtgcy agggcaagaa ggggacggac ctggctcgtgt gcaaggagtc 300
ctgcgcgctc tcccagcagt ccaacctggt gctgtacggc aggatccagt gcaagggcaa 360
gtgcaccgag cagaagggca tcac 384

<210> 4557

<211> 435
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-B2

 <400> 4557

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 cttcgggaagt atggcttgag cgccgcacaa actacgctag aagcctggct gttatgagca 180
 tggttgggta tttgcttggt ttaggagatc ggcattccaag caaccttatg ttagatcgct 240
 atagtggaaa aatattacac atcgacttcg gagattgctt tgaggcttca atgaatcgag 300
 aaaagttccc tgaaaaagta ccattccggt tgactcgaat gcttgtgaaa gctatggaag 360
 ttagcgggtat tgaggggtaca ttccgaacaa cttgtgaaaa tgtgatgcaa gtccttcgca 420
 caaacagaga cagcg 435

<210> 4558
 <211> 373
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-B4

 <400> 4558

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 tgctcgcaca ccacattaag tctctatggc gatgcagatg gtcgcctgcg ccgtactcac 180
 cgttggcgcc actgccaccg ctggtcgctg cgaactatgc cacggcgccc gaatcaagca 240
 gcttctctgc aggcgattac ccggacttac gcaccttact tagctcctca ttgcgcacca 300
 tcggcgcata ttagtcgtga tatttctcca ggacgctctg agggagatgc tgcaggctgc 360
 aactggatgt atg 373

<210> 4559
 <211> 420
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-B6

<400> 4559

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cttgttcctc ctggctcctct tctgcatcgt gcatgggtgag aaggaagagt caaagggcat 120
cgatgcgaaa gcgtccgggc ctggtgggtc cttcgacatc accaagttgg gcgcctccgg 180
caatggcaag acagacagca cgaaggctgt gcaggaggca tgggcatcgg cgtgcggcgg 240
cactgggaag cagacaatcc tcatacccaa gggcgacttc cttgtcggac aactcaactt 300
cacaggccct tgcaaggcg acgtgaccat ccagggtgat ggcaatctgc tggcgaccac 360
ggacctaagc cagtacaagg accatggtaa ttggatcgag attctacgcg tggataacct 420

<210> 4560

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-B7

<400> 4560

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atgtaactac tacgtaccag ctggaatgca tgtcgacgac gatgggttcg agtttcgact 120
tccaataata gtaacaacaa agcaaaggcc ttcctcccg cgtatttgct ttggctcttc 180
tcctccacgc cataagatat ctagcaattg gtgactcgcc ttaattagtt cgctttgctt 240
ttgaggttga ctcgaccatt ttgctgtagc gtgaattgca tggacatgca acgctccaat 300
ggcctttgga atgtggaaat tttttttccc gtttctgtat ttttctata aaatgaagta 360
atgaactggg tcttata 377

<210> 4561

<211> 271

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-C10

<400> 4561

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 tggcgggcag agttctcagg gtcacctcgt tggggtcagt aagccttccc acgtaagcag 180
 tgtgactggc tctaagtggc cgagctgtag ccgcaggtga tccaccagat gagggggaga 240
 gtgtgacggc ccctgacggc accagtcaca t 271

<210> 4562

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-D5

<400> 4562

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 agagggcggt cgagagaaac gagagcggca gacaccatgg ggagctcgag gaccatcggt 180
 gcgtcccccc tgctctcctc cgccctcctc ctcttggtt tcgcgggcac cgccgaggcc 240
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 ttcaggaaga tgtgccagag cttgacgaag ctcccgaagg ttacaacgcc gcgccaactg 360
 gtgccaacct tcaatccctt tcccgcgggg aagggccagg gaggccagaa gccggttggg 420
 caattcccc gcaaggaacc acaa 444

<210> 4563

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-D6

<400> 4563

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 aaggttgccg ccgaggccac tccaatctcc gttgaggttg cggctgatga acaggtagct 180
 gagaaggtgg tgggtggagga gccggctgcg gcggccgacg ttgagcatca gaaggcta 240
 gaggtgctcg ctccagaggc ggccgtcgcc gagcccgacc acaaggagga ggaagccgtg 300

gagaagaccg tcgtcgagga ggagaagcca gcggcagcag cccatgcaga ggaaaaggtc 360
gccaccgccg ccgagaccac gacgacggtg gagggccaaga agaacgccga ggaggccggg 420
aaggagaagc tggcgcagc 439

<210> 4564
<211> 71
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-D7

<400> 4564

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gctgctggtc g 71

<210> 4565
<211> 297
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-D9

<400> 4565

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gcggtgagcc aagccggcgc acgtcgcccc ggggctcagc ctcaccatcg agcgccagcc 120
aattaataag atatatatat agctacgatc gatcgtcagt aagatggcaa gctccgccgt 180
cctgaggagc cccctgtcag tcctcctcta catgctcgcc gcagtgcccg cgatcgccgc 240
ggcgacgtcg accgacgccg cgatcgacaa ggcgtacgcg catcgctga agttcac 297

<210> 4566
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-E1

<400> 4566

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gatggcggtg ccacaacctc tcctgctgtc gctgctggtc gccgtgctag cggtggccgc 120

cgatgtcgcc aacgccggcc acgccaagcc cctaacgcct ggcgggcgcg tggtacacga 180
 caaccacggc aagttcacgg ccggggccgtg gaaacccgcc cagcaaacct tctacggcgg 240
 gcgtgacggg tccggcacca cggcgggcgcg gtgcggggtac aaggacacgc gcacgcaggg 300
 gtacggcggtg cagacgggtg ccgtgagcac tgtgctgttc ggtgacggcg cggcctgcgg 360
 aggggtgctac gaggtgcggg gcgtggacag ccctagcggg tgcaagcccg a 411

<210> 4567
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-E10

<400> 4567

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 acggagtggc gcagagcaga cgcacgtgaa ccattgtagc tgtccctgtc gtcgtcgtcg 180
 tcgtcaacga atccacacaa ggaaaggatg gagaagaagc cgaccatcct catgaacagg 240
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 ctgcggtccg gcgagagcgt ggccatcaag gtcacgcaca aggagaaggt gatgcgcgtc 360
 ggcatgatcg accagatcaa gcgcgagatc tccgtcatgc gcctcgtccg ccacccccaac 420
 gtcgtgcagc tgcacg 436

<210> 4568
 <211> 438
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-E11

<400> 4568

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 acgcgtgggt tcgccgagag ggaaagcaca ttcttcatgg aaacatccgc actggagtcc 120
 atgaatgtcg agagcgcttt caccgaggtc ctaactcaga tctatcgtgt ggtcagcaag 180
 aaggcccttg acattggcga tgaccccgtc gtcacacaa gagggcaaac catcaacggt 240

ggtggcaagg atgatgtctc tgctgtgaag aagtcagggt gctgttcac ctaaactact 300
 tatgaccatg aaaaggaacc atatactctc cgatcatatg attggtaact gaaaatagga 360
 ctctcttggtg cttcctaacc tgttggttat gagattatgt tgggtgctcca gagaaatgat 420
 tagatgttaa gaatttga 438

<210> 4569
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-E6

<400> 4569

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 ccgtcctggc tccccgcgcg cctttctctc aaatccagcg cgaccaacgg tgacaattcc 180
 ctccccaatc ccattctcac ctctcccacc tcgcgcgctt ggttaacggg ggtggacgtt 240
 aacgggttgc gtcgcccgcc cgcgcctgtt tccgccccta ccattcccgg cgaccgcggt 300
 ccccggtggc tgccctcgcc gttcactagc gcggacgtca tgggggcgga ttggaagggg 360
 ctcaagggtg cttaccaggg ttgcgctggg gcgtacagcg aagccggagc aaagaaagca 420
 tacccaaatt gtga 434

<210> 4570
 <211> 260
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-F5

<400> 4570

gaccacgcg tccacgtgc tcaaacagtt ggactcggac gacgacgacg atcagtaata 60
 gcacatcgac gacgacgatc gatatgtaat agcacgtcgt cgacgaccga ccgagtcgt 120
 cgcagactgg ctggcactaa accacaaatc ctcttcacct ggattacaaa tatgtaactg 180
 agaaaggaaa ggaaaacaaa aatgtaactg cgtggctgta ccaaaaaaaaa aaaaaaaaaa 240
 aaaaaaaaaa aaaaaacaaa 260

<210> 4571
 <211> 365
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-F6

<400> 4571

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 aggagaaatg gcttccgcac acaacgtctt ccgggtgttt ttcattcctag ccgtggtatg 120
 tgccgtatgc acagcgaaaa ggacaggagc caacaaggaa gaatcggcgg cagcccccg 180
 tggcgctgct ggaggcagcg gcgggacgtt cgacatctcc aagctcggcg cgaccagcga 240
 cggcaagacg gactgcacaa aggcagtcca ggacgcgtgg acgtcagcgt gcgaagcgac 300
 cggaagcgcc acggtggtga tccccaggc cgaactactg gtcgggcctc tcaacttcac 360
 tgggc 365

<210> 4572
 <211> 441
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-045-Q1-E1-G1

<400> 4572

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 cttttctatt ggtgtgattg ggggcactaa atacctacca cattgcactc agactacata 120
 tactgtgttt gtgtgttgta tgccgtatgc gtgtgtgagc ttgcgcaa at tggacatcta 180
 ggccgtgcgt accctgcgat gaaaggcgcc gtcacggcg catcgaccgt cctgggtcgtg 240
 gcggtggtgg ccaccatctg cgtcgtttcc ttcaaaggca gcggcgatgg cgggagggcc 300
 gaggagggcg agatgtccac gtcggtgaag tccatcaagt ctttctgcca gcccgaggac 360
 tacagggaga cgtgcgagaa ggcgctggag gcngcnggcc gggaacgcca acagccccac 420
 ggagctggcc aaggcatct t 441

<210> 4573
 <211> 396

<212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-045-Q1-E1-G5

 <400> 4573

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 agtctggtec agctaccgcg ccagccaccg cctctacacc cccttcttcc acggacgagg 120
 agttgagccc ttccccgccg gcatccaccg ccgcggcgtc ccctgcggct gagggaccgg 180
 ctgctgatga ctccgccggt gctgctgccc ttggaagtgg agctgccatc gccggcgttg 240
 ccgctgctgt tgctaccatg atcttcttct actaaactca ccgacgatgg tcgtgtcgcg 300
 gtgagacatt aggggtggaca cgtaattggc tgtgctgtaa tcgctctcgt ctggtgggga 360
 gggaggggnac aagtgtttct ttgctttgct cacttc 396

<210> 4574
 <211> 204
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-045-Q1-E1-G6

 <400> 4574

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 actactactg atccgacgat cgactgctgg atcgatcaag catgcatgca tgcattgata 120
 cacatcttgt aacgctgaat tttgattcat ggcacactgt actggacgag gatcattttt 180
 tcttgccctaa gtaaaaggaa aaca 204

<210> 4575
 <211> 372
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-045-Q1-E1-G8

 <400> 4575

 acccacgcgt caagacgtaa gaagtcgtct aattcttgga tcgaattaga cgacttcttc 60
 gtccctctct tcattagcac gctaacttgt aatctgcagg atctaagcaa agacttgatt 120

tagttatgga cggattggta ggcctcttga aagttcgcgt ggtccgggggt atcaaccttg 180
cctaccgcga cgcaagagggc agcgatccgt atgtcgctct acggcttggc aagaagaaac 240
tgaagacaag cgtgaagaag agatccgtga accccatatg gcaagaggag ctaactctga 300
ccgtcacaga tcccagccaa ccaactgaagc tggaggtggt cgacaaggac accttcagca 360
gagacgaccc ca 372

<210> 4576
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-H1

<400> 4576

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ccacggcaaa acaccttcgc cggcgagagc atggcgatgg cgtaccgtgt cctggagggtc 120
accctgggtgt cggcaaatga cctcaagaaa gtgtcgctct tctcccggac tcgcatctac 180
gccgtggctt ccctctccgg attcgacctc cgcctccctt cccacagcac ccaagcagac 240
cacagcaacg gctgcaacct ctgctggaac gccgtggtac acttccccat cccgggtgcc 300
gctgacaccc gcggcctcgc actccacgtg aggctccgcg cccagcgtct atacctgggc 360
gatcgcgaca tcggcgaggt gtgtgtgccc atcgacgacc tcctggccgg cg 412

<210> 4577
<211> 223
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-045-Q1-E1-H8

<400> 4577

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taggagcaac agcaggagca atcccacgcg ttcgatgaca tggcccgcgt cgggtggcggc 120
gccgtgttgg cgctcctagt ggcggtcggg gcggtagccg cgttcgtcgc ggtgctggtc 180
tcggggaggt ctggggagct gagcgccatg ggggtgctgg cgg 223

<210> 4578

<211> 225
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-A12

 <400> 4578

 agtgagtcgt attaaacgat gcgacggagt aaggggagtc gtgtgccccaa ggagcaggca 60
 gaggggaggg cgcgtcgtcc cgctgatgcg cggctcgccg agcctcaggt aggactgcga 120
 gaagaagagg gctgccgtgg atacgatcgt ggctgatgcg ggcgacgccg atgacagcgt 180
 cgggatcaga gtgacggcgc gacagctaag caatgggagc gaagt 225

<210> 4579
 <211> 295
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-B1

 <400> 4579

 tctataactga gtcgtattac aggggtcttcc gcatcctcgt cgccgcggcg ttcgcgcgcg 60
 tgggtctccgc gcaactctct gcagatttct acaagcacgt cttgccgcga cgccgatccg 120
 attagcttgg gcgtcgtcaa gaagcgggttc acggcggacc ccggtagcgc cgccgggatc 180
 atccgcatca tcgtccgcga ctgcttcgca tgctgctgcg acccatcgag cgtgatcgag 240
 ccgatgtcga accaggcctc ctaaatcgaa gggggctcgc acatcatcct cgatg 295

<210> 4580
 <211> 437
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-B11

 <400> 4580

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 cgagggcggc gtcgggtcgt cggggacagc tgatttcaca cgacgagccg gcgagccggc 120
 cggcatttcg tcgtcggatg gcgccggcct cctcctcgtc cgccggcgtc gcgtgcctcg 180
 tcctgctcct gctcctgctc ctgcggcgcg cctccggcgc gcacggctcg ttccaggcta 240

ggcgtgctct gtcagatgac catgggagcg gtatagtggc gcgatggcgg aggttgctcg 300
 ccgacgctgc gactccagcg aacaactctc ttgtgctggc tgcggcgagg actcaccgga 360
 gcgacccctt cgccaacctt accgcgtaca gggcgggctg gaacattagc gacgagcact 420
 actgggcttc cgtgacg 437

<210> 4581

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-B2

<400> 4581

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 aattctgtgg ctcgatcgat cgatcggctg taaggcaagt gagcaagcta tatatatata 120
 taggagatta ttcgagcgag ctaacgagat gggttccgcc gtcctctttt actgcatctg 180
 catcgccgtc gtcgtcgcat tgctgctgctc catggctgcc gtcagggccg ccgccccggg 240
 ggaaccccc aagttcatct cggcgagcgc ccttgagtgc tccgctaacy taacggtaat 300
 agcaaaggcg cgcaagctga tcgatgtcca tggccacggg ctgtgcccgg tgcggttcga 360
 ccacacgcgc gggatcagcg cgggtggccag c 391

<210> 4582

<211> 157

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-B5

<400> 4582

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 ttatatacta ggtatatgcc cgtgcattgc aacggaaaac acttgtgtat acacaggtca 120
 ttttttagta atgctatcaa gaatcaactc ataaatc 157

<210> 4583

<211> 317

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-C12

<400> 4583

tatagtgagt cgtattacaa cgagggagggc ggcattgcgcg gggggcatcg tgcaatggcg 60
cggcgggtgcc cgtgcaggct gctgctagcc gtggcggcgg cggccgtgcg cgtggccgct 120
gcagcacacg cgcaggagac gtgctcgggg accgtccccg cgcgcgcgcg ccgcggggcg 180
cgggtgtccg tggccagctt cagcggcccg ggcgatggac ggagcctcgg aacggcggcg 240
tccgcgcgcg ccgtgcccag cattcgagcg cggggccgcg ccaggcgggg ggcgagctcg 300
gcgttttttt tttgggt 317

<210> 4584

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-C4

<400> 4584

gggtcgaccc acgcctctag ccagcctcgc attaacgaag atggcggttca tcagcaatgt 60
cgcagtgaag gcggcggccg tggccgcgct gctgctggtc gcagcgggtg cgccctgccgc 120
gcgcgcggcg gcggtggcgg tggcgggagg ggcgcgcgtcg gtgccggcgg gtccgctgga 180
catcgcgag ctgggcgcca agggcgacgg caagtcggac agcaccocga tgatcctcaa 240
ggcgtggaag aacgcgtgcg aggcgacggg ggtacagaag atcgatcatc cgccggggcaa 300
ctacctgacg ggcgggctgg agctgaaggg ccctgcaag tcctccatca tcatccgtct 360
cgacggcaac ctgctcggca ccggcgacct cagcgcgtac caaaggaact g 411

<210> 4585

<211> 171

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-D11

<400> 4585

gtgagtcgta ttaaatttcg aggctaaggt cgcggatttc ggacttgcca agctgacgac 60
agacaccaga catgcacgtc tcgacgcgtg tcatgggaag tttcgggtgg gtggccccgg 120

agctcacgtc aagcggcagg gtcacggagg agtcgtgggt gttctccttc g 171

<210> 4586
 <211> 253
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-D12

<400> 4586

tacaacacac tagagtgagt cgtactactg cgcgcatctc tctacacttc tactgcttca 60
 tactctcgta gagagatccc cgcgggcccaa taaaaacccg actcgctagc tgcactacac 120
 actcgagat ggccggcctc aggatgaagt tcgtcgccgt cgccgccatg gccgccgcgc 180
 tcgtggcgtc cgccgcagcc gccgaggccc ccgccccggc ccccgctcc gacgccgcgg 240
 ccgctctaga gga 253

<210> 4587
 <211> 429
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-D3

<400> 4587

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 gactgtgtgg cgcacacccg cgtcatctgc accaagacgc acaactgccg ggacgacact 180
 tgcgcggggc gcggcatgcc ggacggccgc tgccactggg agttccccaa cctggtgccc 240
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 gccggcgatg atggatggtg cccaactgcg actgccagc ctgctccatt cgttgttgtt 360
 taaggcataa tatataaact gccaaattca catgtatttt gggatatttg ttatcatact 420
 atgaaatga 429

<210> 4588
 <211> 424
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-046-Q1-E1-D4

<400> 4588

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 caccatcaca tccagccagc caacaaaaat gtcgcgcgtc acagctgcgg tgetcttcta 120
 catcctcgcc gttgctgccc tcagcgcggc cgaggccccg gcagagtcac cgaaggaagg 180
 cagtgtgcc aaggcacctg agtctgcaa gagaactgct gccccgctg aagcaccga 240
 agcgcaccc acccccgctc ccgcgcgtgc cccatcgccg tcgtctagga agtctggtcc 300
 agctaccgcg ccagccaccg cctctacacc ccttcttcc acggacgagg agttgagccc 360
 ttcccccca gcatccaccg ccgcggcgct nctgcggt gagggaccgg ctgctgatga 420
 ctgc 424

<210> 4589
 <211> 381
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-046-Q1-E1-E10

<400> 4589

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 gccaagaaac aagtcctgga caacggcacc gaaatggagg tgatgggcac gcagcagaga 180
 cgggatctcc aggccaacat tccagcattg cgtaaacctg acacgatgct tctcgactac 240
 ctggataact tcaaggaacg caacgagttc tggtagctga agcgcgactc gtgctcagag 300
 agcgagaacg aggagaggtc cgacgagaaa tggtagatcc cgatcgtaa nggtgcccc 360
 ggcgggcttt ccaagaactc t 381

<210> 4590
 <211> 366
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-046-Q1-E1-E11

<400> 4590

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cattgggttag ggctctcatg ccatagtcta atttggagta ctaaagcatt gcacgaggcc 120
tgcacatcag aatcctgacg caatgagaca cactgattcc tcattccctg tggagggttc 180
agtgtccgca agatcaactt catacgatct tgtaaaggct atctgatcat ccantgaat 240
ggaaatccgc ttccgatgcc tatgagtatg caactaaggg atcattgcat tatactctca 300
aattctaaac atggtgtcac ctgatcatca ccagcgccag atcactgtca acgggtacag 360
gccaca 366

<210> 4591

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-E12

<400> 4591

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gcctcttgaa agttcgcgtg gtccggggta tcaaccttgc ctaccgagac gcaagaggca 120
gcgatccgta tgcgtccta cggcttggca agaagaaact gaagacaagc gtgaagaaga 180
gatccgtgaa ccccatatgg caagaggagc taactctgac cgtcacagat ccagccaac 240
cactgaagct ggagggtgtc gacaaggaca ccttcagcag agacgacccc atgggagacg 300
cggagggtgga cgtggcgcca ctgatggagg cggtgagcat gaaccgcggg gaggagagtc 360
tgaggaacgg cgccatcatc aggtccgagc ggccgagcgc caggaactgc ctgcgcgacg 420
agagccac 428

<210> 4592

<211> 311

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-E3

<400> 4592

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 agtgctggaa aagacttgcg cttacgcggg cgctgcact accatcacga ccgtatgaat 180
 aagcatacag gagaaaggat gtatcaattg ggatgttcgc acgatgatct cggccacaag 240
 caacgaggag gaggcgttgt tcagtgtcag ttaatccacc aatgactatg gatatcacat 300
 gacgatggga t 311

<210> 4593
 <211> 403
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-E6

<400> 4593

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 gcgctccttg gtgcggcgcc ggccgcgcgc aacgcgccc gcggggcggt cagcaactgg 180
 gtggcgatga accagcagag ctacgcgctg tacgcgcaga agtccgtcgg ggacgggggc 240
 aaggagcccc tggacaagaa gctgtcggag gcggagaaga agaaggcac gtacgtgggtg 300
 gacccacgcg gcaagggcga ctacaccaac atcaccgcgg cgctggagga tatcccggtg 360
 agcaacacca agcgcgtgat cctggatctc aagcccggcg ctc 403

<210> 4594
 <211> 153
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-E7

<400> 4594

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 gtaatttcaa ttcaccgacc ttcgttttac aacttccttc cgggaaaaac ccgggggttc 120
 acccaattaa gtcccctttc aagacacccc ccc 153

<210> 4595
 <211> 410

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-046-Q1-E1-E9
 <400> 4595
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 ttcttggaac cagtgaagct gatgagattc acaagatatg caatgtcatc ggtagtccag 120
 atgagcaatc ttggcctcaa ggattgtcac ttgcagaagc aatgaagtat cagttcccac 180
 agatcaaagg cagtcaactg gccgaggtga tgacaacagc cagtagcgat gcaattgata 240
 tcatctcatc actatgctca tgggatacta gcaagagacc aaaggccgca gaagtccctc 300
 agcatacctt ttttcagggt tgtacatgtg ttccacttcc tgtccgtcca aaagcttcat 360
 cacttcttag aacacctcca tgtgttggat caaaaggaaa ttcagagaac 410

<210> 4596
 <211> 431
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-046-Q1-E1-F12
 <400> 4596
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 ccgccgtcgg cgcgcctc ggggccgccg tcgctcctt ctgccttac tacattcagt 240
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 tgcgcgcatt ccgatgcgtg ggcattttt ttgattcgac acaccttttg tctctttttt 360
 ctttgttccc tctttctcct taatttaacg aattgatgca tgccgctgat gttcttcccc 420
 tgagagaggg a 431

<210> 4597
 <211> 100
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-046-Q1-E1-F2

<400> 4597

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gcgtaaccat ggttcgggct aggatcgctc ttgtcattgc 100

<210> 4598

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-F3

<400> 4598

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ggaggctaca gcgggttggg ggccgggtggc ggaggcggcg gcggcggcta ctccaccccg 180
agcgaggcag cgccatccac gcctgccgct ggggagacga cgacccttc gtcaggcggc 240
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actccttcgt caggcggcgg gggttaccgc ggtgcaaccg gcaaggcttc ctcaggcggc 360
ggcgggctgg accccgacgg cgaccagag gttgggctga acgggaaagc gatcgaagag 420

<210> 4599

<211> 262

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-046-Q1-E1-F7

<400> 4599

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attttaccct tgggcgacca gcttattttg ctggaggccc cagatgaaca aggctaaata 120
tatgatgttt tcgtgtccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagaaaaa 180
aaaaaaaaaa aaaaaaaaaa agaaaacaga aaaaaagaga aaaaaagtga gagattcaaa 240
aacctacaga gacatccaag ca 262

<210> 4600

<211> 408

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-G3

 <400> 4600

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 ctgccggccc cctccgcccc gccgcaggtc accgcaagac ggcgctgcgg agtgcctggg 120
 gtgcgcacgg gttgttttgg cgaccccgag atgaagcggc cagcgcgggt ggcgggctac 180
 aatgcgtacg cgggtggggg caatgtgaag gcgtccctcc gccggggcct caggtgggttc 240
 aagcgcaaat gtcacgcat cttgaatata tgaccaccgt gcgagtgcgc gcggcggcgt 300
 tctcccactc gtcattggatc gcaaggccgc tcttttaccg caacaattat ggcattgcact 360
 ctgcggtgca ttgccaatth atgcattgat caagaactcg cgtgattg 408

<210> 4601
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-G6

 <400> 4601

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 gaattagacg acttcttcgt cctctcttc attagcacgc taacttgtaa tctgcaggat 120
 ctaagcaaag acttgattta gttatggacg gattggtagg cctcttgaaa gttcgcgtgg 180
 tccggggtat caaccttgcc taccgcgacg caagaggcag cgatccgtat gtcgtcctac 240
 ggcttggaac gaagaaactg aagacaagcg tgaagaagag atccgtgaac cccatatggc 300
 aagaggagct aactctgacc gtcacagatc ccagccaacc actgaagctg gaggtgttcg 360
 acaaggacac cttcagcaga gacgacccca tgggagacgc ggaagtggac g 411

<210> 4602
 <211> 301
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-G9

 <400> 4602

cgcggggtcga cccacgcgtc caggataggg cgatcacatc ttccaataaa gcaagtagct 60
ccagcttttaa gaagctgccg cctgttcttg tcacatgatg aatcaacggg atgggttcttg 120
tggtatatttc tgcttaacgt ggcattagtg gtggatatga atcttactcc atgggttgatg 180
gggatgaaac tctcatatgg agtctgcaga ctgcaagtaa tgaggggtgag catttgatgg 240
ttgatgttcc caggaagcag ggccagcggt gccagttttt ttggcacgaa agagtaaattg 300
g 301

<210> 4603
<211> 390
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-046-Q1-E1-H1
<400> 4603

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gccgaaaacg gggtgacaat ggcggggaac gacggcgact cgcggtgtt cgtcgacctg 120
gagcccggttc cggccatcag caagcggcac ggcggcagcg tcggcggcga ccacgcggcg 180
ccgtgcgcca gggctaggac catgtccacc agcttcaagg agccgccttg tgtcgccgaa 240
cacctccctc tctctggccc cgtgcagctc gggcggtcca ccggcttctc ctgggccaag 300
aagccccggc ccgacgccac gacggcggcg gtaactgtga cgatgcggag cggctccatg 360
gggccaggga ccaacaggaa caacaacagc 390

<210> 4604
<211> 67
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-046-Q1-E1-H11
<400> 4604

aagtgagtcg tattaaacag tacgactcac tatcgggacg ctaggagcg tgggcgaaac 60
aagggag 67

<210> 4605
<211> 384

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-046-Q1-E1-H8

 <400> 4605

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 gatcccgatc cgccgaccgc tcccagcccc gctcgcagcc atgtcgccgt cggagccgac 120
 gcgggaggag agcgtgtaca tggccaagct tgcggagcag gcggagcggc acgaggagat 180
 ggtcgagttc atggagcgcg tcgcgcgcta cgccgggggc gccggcggcg gggaggagct 240
 ctcggtggag gagcgcaacc tgctgtccgt cgcctacaag aacgtcatcg gcgcccgcag 300
 ggccctcgtg cgcatcatct cctccatcga gcagaaggag gaaggccgcg ggaacgaggg 360
 gcacgcccga tccatccgcg ccta . 384

<210> 4606
 <211> 390
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-047-Q1-E1-A1

 <400> 4606

 taccggtcct acattcacgg gtcgaccac ggcgccacc acgcgtccgg ctctctcttc 60
 ctctcctcca tctctcaacg cctgaagctc accgcacctc cctctctcgc cgcggatccc 120
 ccactactcc ggtagaaaat ggctgacgct gaggatatcc agccccctcg ctgcgacaac 180
 ggaactggca tggtaaggc tgggttcgcc ggcgacgacg ctccgagggc cgtcttcccc 240
 agcatcggtt ggcccccgcg ccacaccggt gtgatgggtg ggatggggca gaaggatgcc 300
 tacgtcggcg acgaggcgca gtccaagagg ggtatcctga ccctcaagta ccccatcgag 360
 cacggaatcg tcagcaactg ggacgacatg 390

<210> 4607
 <211> 403
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-047-Q1-E1-A12

 <400> 4607

cacgcgtccg gggcgaatac ggaacagtga tcttccgagg ggataagcac tatgtgccta 60
 gcggttctgt ctccattctt gctgggtgca agaacgtagt ttacaatacc aagagagtgt 120
 ttgtacaaca cagtgaaagg tcattccata cctcagatgt aacaagcaag aataaccagt 180
 gggagatgtt ctcagaaacg atcccaaagt atcgtgatac taaagtcagg acaaaggaac 240
 ccctagagca atataaccaa accaaggacg atactgacta cttatggtac accacaagct 300
 ttcgcttggg gtcggacgat ttgcccttta gaaatgacat ccggcctgtg cttcagggtca 360
 aaagtagtgc acacgcaatg atgggatttg ctaatgatgc ttt 403

<210> 4608

<211> 384

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-A4

<400> 4608

gacccacgcg tccaatcgcg atcgccgcac tttttttttt ttttttttgt tcaatagaca 60
 tacattttat taaatatgca gggcatcgta gaaaagaatg gttctccctt ccaaaaagca 120
 aaagaaaaga aactcgtata gtcgatcgac gaccatgcat cacatttcct tttcctcgat 180
 cttctcttat ttccgcagaa aaacaacgaa ggaaacccaa ccaaggaaac gcatgctatt 240
 gcttaagcat cgccggagga gctggtcgat cgctcgctca ctcacgggcc tgattgttcc 300
 ggtcacctgt cgctcgtcgc gagctgagac acgctcctcc agaagcccgt gccgtagaac 360
 ctggcccata cctccttctc aagc 384

<210> 4609

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-A8

<400> 4609

ctcgcgggtc gacccacgcg atccaagctc tctcctcatc acccaccag cgcgacgaaa 60
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 gcggtacacc gcctccctat cagcctcat cgattcctca ggtctacgtt ttttttggtt 180

ttgtgattta tccaaatttg gaccgcaagc atgactacgg cgaatcatta tcagcacatc 240
 atttcaccca agcctgttgt gggcaaagca tgaaaattga aggatctcat gataaaatgt 300
 gataatagga tatgtgctga ctgtggtgca cctgatccca tatgggcac c tactaatatt 360
 ggagtgtttc tttgcttaaa atgtggacat gttcataggg cacttggacc t 411

<210> 4610

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-B1

<400> 4610

gggtcggccc acgcgtccac ggacgcgtgg gcgaattccc aggcaggcag gtcggcgagg 60
 agggcaggaa gaccgaagac cgagccgtgc gggggctcgg gacgggaacg ggacaggacc 120
 ccaaaatctc agatccttcc tgcccggccg cccgtgcccg tcgacgcgtc gttcttgccg 180
 gccgcgcctc acctccgcc tctcctcctc cagggggatc ggatacgcca caggctgcgc 240
 gatggtgctg tgggtcttcg gctacggctc cctcatctgg aaccccggtc tcgacttcga 300
 cgacaaaatc ctgggttca tcaagggtca caagcgcacc tttaatctcg cttgcattga 360
 ccacagaggc acaccggagc at 382

<210> 4611

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-B12

<400> 4611

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 ccacatcagc catgggggcc tgcgcaacca agcccaagac gcttgagggg cacgccccag 120
 ctgaggccgc cgtctccaca cccaacgttg cgcccgaggc cactccaatc tccgttgagg 180
 ttgcggctga tgaacaggta gctgagaatg tgggtggtgga ggagccggct gctgcggccg 240
 acgttgagca tcagaaggct aatgaggtgc tcgctccaga tgccggccgtc gccgagcccc 300
 accacaagga ggaggaagcc gtggagaaga ccgtcgtcga ggaggagaag ccagcggcag 360

cagcccatgc agacgaaaat gtcgccaccg cgcgcgagac cacgac

406

<210> 4612

<211> 368

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-B2

<400> 4612

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tgctcgctgct ggctcgccgtg ctagcgggtgg cgcgcgatgt cgccaacgcc ggccacgcca 120
agccccctgac gcctggcggg cgtgtggtac acgacaacca cggcaagttc acggccgggc 180
cgtggaaacc cgcccacgcg accttctacg gcgggcgggg cgggtccggc accacggcgg 240
gcgcgtgctg gtacaaggac acgcgcacgc acgggtacgg cgtgcagacg gtggccgtga 300
gcacggtgct gttegggtgac ggcacggcct gcgggcggtg ctacgaggtg ccgtgcgtgg 360
acagccct 368

<210> 4613

<211> 376

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-B4

<400> 4613

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gatcacgcgg cgcattgtcg aggtgagcgg gggcagggtc gcgtcctgc gcgaggcgtg 120
cgaggacgac gacggtgtgc acctcgtcat ggagctctgc gagggcgggc agctcttcga 180
ccgcatcttc gagcggaagc actactccga gcgcgcgcc gccaaagctc cccgcacat 240
cgtcgaggtc gtgcagctgt gccacgagaa cggagtgatg cacagggacc tgaagccgga 300
gaacttctg ttctgaaca agtcggagga gtcacctctc aaggccatcg acttcggcct 360
ctccgtgttc ttcaag 376

<210> 4614

<211> 368

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-047-Q1-E1-B5

 <400> 4614

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 atcattgaac cttccctcca ggcgctcgcc cgcaagtaca accaggacaa gatgatctgc 120
 cgcaagtgct atgcacgcct gcaccccagg gctgttaact gccgcaagaa gaagtgtggc 180
 cacagcaacc agctgagggc aaagaagaag atcaagaact gaagcttgcc aaatcggttc 240
 cttgcatggc ttgcgtcaac aagacgtaca agtttcaaag cttttgtatg ccataggctg 300
 ctgcaacgtt tttaagtcgg aactcatgtg ttctgttca gggctctcag catgacataa 360
 atcgtttc 368

<210> 4615
 <211> 403
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-047-Q1-E1-B8

 <400> 4615

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 cttaccaaca acagcagcag caagcccacc cgttcgacga catggcccgc ctgcggcgccg 120
 gcgcggtgtt ggcgctccta gtggcggtcg cggcggtggc cgcgttcctc gcggtgccgg 180
 cctcggcgaa gtccggggag ctgagcgcga tggggttgct ggcggcgaag ggcggcagcg 240
 gcgcggggccc gcagaagtgc tcgggcgcgg tgggcgagtg cgacgtggac gaggcggagg 300
 agctcgggct gagcggcggc ggcctcggct ccgacgacgc ggtgcggcgg acgctggcgc 360
 agcgggaagcc gaccaaccgg tacatcagct acgcggcgct gcg 403

<210> 4616
 <211> 278
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-047-Q1-E1-C10

 <400> 4616

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gaattccaaa gagtggaaaa caagcaaaag gttaaataata catgccatit ttggaggcat 120
ttttttcatg agggcatggt tcgatatatg gaccactaaa tatacatatc atttactttc 180
ctaaaaaaaa aaaaataaaa aaaaaaaaaa aaaaaagata agaaaaaaaa ataaaaaaaca 240
caaacaaaac aaaaaaaaaa taaacagaac acataaat 278

<210> 4617
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-C11

<400> 4617

gggtcgagcc acgcgtccaa acaaagtcgt gttcctggcc atcagcgtcc aggatctacc 60
cgtcaccatc atagcaaccg tggacgacga tacgttcagg atcgccgtag agcacagggt 120
cagggtcgag tacatgaatt agcagatcgc gaaggagcag caccaggagg cgcgcataga 180
cgatcagatg ctctgtgcgt agggctagga tctctacaac cggcagctta tcaaggatgt 240
ctgcaagggc aactatgatg tcatacactt gctgcatccg cgctccctcg acgagggcaa 300
caagtcattt cggaagacgt agttaccgct acggtgttac aacgtcaaga tcaaccacat 360
atgcagcggc cataccgtca tgatccatga caagctctac gaagcgc 407

<210> 4618
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-C12

<400> 4618

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ctccgaacga cgtgggtgcc gtgcgccga cggccgggtg acggacacgg cagctgctac 120
gagaggagga ggatatatac tagtatatag ctagagcaat tattagctgg tcgtaagcat 180
gaatcgacga ttggacatga tagacaacat cgacggccgt cgggtaacca agaacaaggc 240
gcgcatccaa gttggcgact cctcttcgtc ggacgaaagc gacagggaga aggaggaaga 300

tgaagaagaa gcacatgagg aagtgggtcaa agcgcccccg ctgggttggga atcatcacat 360
 tcaccacgaa gcggccggcg gcattggcag caacagcaac atgacgcggc ttctgtcgaa 420
 gcagctgtcc atga 434

<210> 4619
 <211> 443
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-D3

<400> 4619

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 gccggccggg cttgtcgtac gtctccaat ctgttgacgg tcaggccctc tagcttttgc 120
 tcggcgttct ggagacagag cgagagcgag agagagagag agagagagag gtagacggag 180
 atggagtgcc tgctggggct gctcaagggt cggggtgggtgc gaggagtgc cctggccatc 240
 tgcgaccgcg tcacccacag cagcgacccc tacgtcgtcc tccgccacgg aaagcagaaa 300
 gtgaaatcaa gtataaaata ccgcacgatt caaccagaat ggaacgagga gctcaacctg 360
 tccatcacga acatgatgaa cccgggtcaag attggactcc tcgaccacga cacgttcacc 420
 aaggacgaca gcatgggcaa cgc 443

<210> 4620
 <211> 431
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-D5

<400> 4620

ccacgcgtcc gccacgcgt ccgggcaagg gacgtaagaa gtcgtctaata tcttgatcg 60
 aattagacga cttcttcgtc cctctcttca ttagcacgct aacttgtaat ctgcaggatc 120
 taagcaaaga cttgatttag ttatggacgg attggtaggc ctctgtgaaag ttcgcgtggt 180
 ccggggatatc aaccttgctt accgcgacgc aagaggcagc gatccgtatg tcgtcctacg 240
 gcttggcaag aagaaactga agacaagcgt gaagaagaga tccgtgaacc ccatatggca 300
 agaggagcta actctgaccg tcacagatcc cagccaacca ctgaagctgg tgagtgagca 360

gcaggcagaa cgatcctggt tgtgattcat tattctagac tgtttgctac aggaggtggt 420
cgacaaggac a 431

<210> 4621
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-D6

<400> 4621

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tcgtaagcag aatgggtgata gagcattgtg ggaatatccc ttgctgtag ctggtgtaaa 120
tattacattc atgctgattc agatgcttga ccttcaagca gctaagccaa cgtcgttggt 180
tggagcgggt ttcttaaadc tactcttaga aaatgatcga gcgttcgaca ttctttactg 240
cataaccttc aaactgatgg atcagaaatg gcttgaaatg cacgccagtt acatggattt 300
caatacgggt attaaatcaa cacggcgcca gctcgagagg gagctgttgc tagaagatat 360
ccagagaatc gaggacatgc catcgtacag gtttctcgcc tgctagcaat t 411

<210> 4622
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-D7

<400> 4622

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gtccgaaggc cgcgtcgtct acgcggacat gaagctggct gatacggaat ccgatgcgcc 120
ggcgccggcg ccggcgccgg ggccgtcgtc cggttgaact gagaagcgtg cgtccagcca 180
agcaaggtgg tcaaaaccga gaactaatta agggctcgat tgtgtgtccg gctactactg 240
ttcttgccat aattatatat agatacgcaa agtgtggcca agcctacca catgcatgct 300
attgcatgcc tccgaatata tattatccga ctcgatcctg ccaaattggt tcgtcgactt 360
cattatatat atcccatccc tttaatttaa tggagaagtg tgactgctgt tcgtgatggt 420
tttgtatgcg caaa 434

<210> 4623
 <211> 413
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-D8

<400> 4623

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ccgcccgcgc gacacgcgcg ccatggccat gctggctcgc tccgcccgcg acctcttctt 120
cttccttctc ctggtctcca ccgcccgcgc cgtgcggacc atccccgacg aagcccgcgg 180
ccccgaaaac aacatccacg aggcgtgcag caagacgctg ttccccaagg tgtgcctgca 240
cgcgctcaag gacaaccccc agtgccaggc gggggcggtc acgcccgcgc ggctggccga 300
gctgctcgtg tacgtgtcgg ccgaggtggg catgaccgtg gccgcgttcg cgcaccacga 360
gctcaactcc atcaaggacg acgtcctgta caagtgcctc gacacctgct ccg 413
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<210> 4624
 <211> 426
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-052-Q1-E1-D9

<400> 4624

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tgtgttcctc gccgtggcct caccggcggc tctggccgcc ttcgatgtga tagagatgct 120
ggccgacaag cccacgtact ccacgttcct gaagctcctg caggacacca aggtcgcggg 180
cgaggcgaat cagctccggt cggcgacgct actggctcgtc cccgacaaac ttgccaagcc 240
tctggcgtcg ctgcccgcgc ataaggtgcg gccggcggtg gagaaccacg tccttctcag 300
ttacttcgac cccatcaagc tggacgagat gaagacacgc accgccatcc tccccacgct 360
gctctccgtc ancgacaaga aactcggcgt cctcaactac accagggccg acgacgggca 420
gatgta 426
```

<210> 4625

<211> 474
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-052-Q1-E1-E1

<400> 4625

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tgcaggtgcc ggtctagaat taccgggtcg agccacgcgt ccgaaacaac aagactgaca   60
gcgacgatga tgccacagct gcgtagcctc gtcgcgctgg tcctcgtggc cagggccata  120
gccgccgctc ccggcggttg gtttgcgctc accggccgca tctactgcca caactgccgc  180
gccgggttcg agacaaacgt gtcccacgcc atccaaggcg cgacggtgga gatggagtgc  240
cgccacttcg agtcgcagca ggtccacgac aaggcggagg cgacgacggg ccccgggcggc  300
tggtacagga tggagatcag cggcgaccac caggacgaga tctgcgacgt gcgcctgctc  360
aagagccccg aggcggactg cgccgagatc gaccactccc gcgaccgctg ccgcgtcneg  420
ctcaaccgca acgacggcat caagcagagc ggcgtccgct acgccaaccc catc       474
  
```

<210> 4626
 <211> 454
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-052-Q1-E1-E10

<400> 4626

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cgggtcaagaa ttcacgggtc gacccacgcg tccgcgagat tctacgcgtg gataacctgg   60
tcatcacccg caagggaaac cttgacgggc agggcccagc cgtgtggagc aagaactcct  120
gcaccaagaa gtacgactgc aagatccttc ccaactcgct ggtgatggac ttcgtgaaca  180
acgggggaggt gtccgggatc acgctgctca actccaagtt cttccacatg aacatgtacc  240
agtgaagaa catgctgac caggacgtga ccgtgacggc gcccggggac agccccaaca  300
cggatggcat ccacatgggc gactcatccg ggatcaccat caccaacacc gtcattggcg  360
tcggcgacga ctgcatctcc atcggccctg ggacctcaa agtgaacatc actggcgctga  420
cctgcggccc cggccacggc atcagcatcg gcag                               454
  
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<210> 4627
 <211> 445

<212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-E2

<400> 4627

gggccagaat accggggtcga gccacgcgtc cggcggtggc cacgatgacg actaataagc 60
 ccctcctcct cctcgccctg gcgtccgcgc tccttggtgc ggccgcccgc gccgcgaacg 120
 cgcccgggcg ggcggttcagc aactgggtgg cgatgaacca gcagagctac gcgctgtacg 180
 cgcagaagtc cgtcggggac gggggcaagg agcccctgga caagaagctg tcggaggcg 240
 agaagaagaa ggtcacgtac gtggtggacc ccagcggcaa gggcgactac accaacaatca 300
 ccgcggcgct ggaggatatt ccggtgagca acaccaagcg cgtgatcctg gatctcaagc 360
 ccggcgctca gtccgcgag aagctgttcc tgaacatcag caagccgttc atcacgttcc 420
 ggctcggaccc caagaaaccc gccgt 445

<210> 4628
 <211> 432
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-052-Q1-E1-E4

<400> 4628

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 ggcatcgatg cgaaagcgtc cgggcctggt gggtccttcg acatcaccaa gttgggcgcc 180
 tccggcaatg gcaagacaga cagcacgaag gctgtgcang aggcattggc atcggcgctg 240
 ggcggcactg ggaagcagac aatcctcata cccaagggtg acttccttgt cggacaactc 300
 aacttcacag gcccttgcaa gggcgacgtg accatccaag tggatggcaa tctgctggcg 360
 aacacggacc taagccagta canaggacat ggtaattgga tcgagattct acgtgtggat 420
 aacctggtca tc 432

<210> 4629
 <211> 409
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-E5

<400> 4629

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tgttcgtctc ccagatcggtg gtggggcacgc tgatecgcgct ccagttcggc accgccggcg    180
tggggcgagat gtcccgcctcc aacgcctggc tgctgggtgct cttcatctgc ctctacgtcg    240
ccgggttcgc ctggtcgtgg gggccgctgg gctggctcgt ccctcggagg tgttcgcgct    300
ggaggtccgg tcggcggggc agagcatcgc cgtgtgcgtc aacatgctgc tcaccttcac    360
catcggccag gccttctca gcatgctgtg ctcgctcaag ttcgggctc                    409

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<210> 4630

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-E6

<400> 4630

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ccacgcgtcc ggcgatgtac ggcattgcag ttgccgctct tggatatgctg agcacaatcg    60
caactgggtct tgctattgat gcttatggtc ccatcagtga caatgctggg ggtattgctg    120
agatggctgg aatgagccac agaatccgtg agagaactga tgctcttgat gctgctggca    180
acacaactgc tgctattgga aaggggtttg ccattggttc agctgctctt gtgtccctgg    240
cgcttttttg tgcttttgtc agcagagctg gagtgaaggt cgtcgacgtc ctctccccc    300
aggttttcat tggtttgatt gttggagcca tgcttcgta ctggttctct gccatgacca    360
tgaagagtgt tggaagcgct gccctgaaga tggt                                394

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<210> 4631

<211> 432

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-052-Q1-E1-E7

<400> 4631

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tacttcttgg tggttggtctg cgcatagggt ccagattatt tacatccgat caggggtgtac 120
tgcatcatat ctacatagga ataccgtttg tctgccttac tcaaccaatc aacgctctgg 180
cttttgtttt tgatgggtatc aattacggag catcagattt cggatatgct gcctactcaa 240
tggtccttgt tgccgttgct agtatcattt gcatectcac tcttgaaagt tatggcgggt 300
ttattggaat ctggatagct ctggtgatct acatgagcct ccggatgttt gctggatttt 360
ggaggatang gacggcaciaa gggccctgng cttatcttcg cggctgaaca tagaggcaga 420
gctagtaacc tg 432

<210> 4632
<211> 453
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-052-Q1-E1-E8
<400> 4632

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gtgggcggcg ccggcgacat cgccgcggtg tcggtgaagg ggagcaagcg tgtcaagtgg 120
acggagatga agcgcaactg ggggcaagtg tggcagaccg gggaggacct cacctgcgag 180
tcgctgacgt tccgggtgat gaccagcgac caccgcaagg ccacctcatg gcacgttctc 240
cccgtgact ggaagtccg tgtcacgtac caggcatcca agaacttcta agtagccact 300
tttctctctc ttcttcaacc tgcatatgcc cacaagcaac catgcagatg ataacatgca 360
tcatgcatgc atattcattc ttctgctcat gcattccgat atggtgccgg agttaaaaaa 420
atgtaaatca atgtgcaaac tcaaatgaca tct 453

<210> 4633
<211> 300
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-052-Q1-E1-E9
<400> 4633

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 cgagaccgcc gagaagtgcc tcgccgagtt cggcagcgac cgcattctcca tgggcgacgt 120
 gctgtggaac ctcgagtacg cgctgcagct gcaggacgcc aaccgcgccg agggcgcgcg 180
 gcagggcggc gacggggacg accaggacgg cgccgcggcg gccggcgcg gcggcgcngt 240
 cgtannccgc ggcggtgccg tgcccagcgc gtccgacgcc ggcgccgggg agctcttccc 300

<210> 4634

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-F1

<400> 4634

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 tcgccggcga tcgaatttga ccgccggtcg gcgagcggag catacgtgca tacatggttt 120
 gcctgacgcc ggcgggcgcg gcgctgctgc tcgtcgctgt cctagcggcg gccgtgtccg 180
 cgctcccggc gatcaacgtg acgacgatgg cgttcgagga cgggtacgcg ccgctgttcg 240
 ggcaaggcaa catcctccgc tccgccgacc accgcaccgt cagcctcttc ctcgaccgtt 300
 ccaccgggtc cggtttcatc tcgtcgctca tgtaccagca cggcttcttc agcgcgtcca 360
 tcaagctccc ctccgactac a 381

<210> 4635

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-F12

<400> 4635

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 tgctgcccc accgcggcca aggccccggc aaattcaccg aaggaaggca ttgctgcaaa 120
 ggcacctgag tctgcaaaaa aaactgctgc ccccgctgaa gcacccgaag ccgcatccac 180
 ccccgctgcc gccgctgccc catcgccgtc gtctaggaag tctggtccag ctaccgcgcc 240
 agccaccgcc tctacacccc cttcttccac ggacgaggag ttgagccctt ccccgccagc 300

atccaccgcc gcggcgctccc ctgcggctga aggaccggct gctgatgact ccgccggtgc 360
tgctgccctt ggaagtggag ctgccatcgc cggcgttgcc gctgctgttg ctaacatg 418

<210> 4636
<211> 398
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-F2

<400> 4636

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gcttcgggtg tccaccatgg cgcagcgagc ggtggccacg atgacgacta ataagcccct 120
cctcctcctc gccctggcgt ccgcgctcct tgggtcggcg ccggccgccc cgaacgcgcc 180
cggcggggcg ttcagcaact ggggtggcgat gaaccagcag agctacgcgc tgtacgcgca 240
gaagtccgtc ggggacgggg gcaaggagcc cctggacaag aagctgtcgg aggcggagaa 300
gaagaaggtc acgtacgtgg tggaccccag cggcaagggc gactacacca acatcaccgc 360
ggcgctggag gatatcccgc tgagcaacac caagcgcg 398

<210> 4637
<211> 445
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-052-Q1-E1-F4

<400> 4637

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tctgccggag agcttcgagg actgcacttt cgagtggctc tactggcctc agtgccggga 120
gcccttcagc gacgagacgg tggagtacgt gcggtccctg gacgcggagg aggacgtgac 180
tatgctgagg ctccacgggt gggaggtgtc gcgcgagtgc gcgcgcacgc tgcgcgtcgc 240
caccatgctg ctgaagaagg gtgtggagag gggcctcacc gccttcaca tcgggagcat 300
catgtgcaga gagaccctga ccaaggagtc cgccatcgaa gagatcgtcc gtgaggcggc 360
ggaacgggga ggaggatgcg agactgtctt cttgcaggct gtctcngaga tcatggaccg 420
ccgtctcgac gacatcaaag aacat 445

<210> 4638
 <211> 437
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-052-Q1-E1-F5

 <400> 4638

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 cccgctggac ctgatgacac gtcgccgccg ctttcttcca actcgtcgac tccgcctcct 120
 tccgactcat cgacgccgcc acccaattcc tccggctcgg gtcgccgctc gccatcgcga 180
 cccgcacagt cattgtcgcc gccaccaacg ggcgtcgccg aggatagcac ggcgccaccg 240
 gccagaggct cgccggccgc gcagtcgacg gactccccgt catcatcggc tccaaagctc 300
 aacgacagtg actccgataa tagtggtagc agcaggagcg gaagcggaag caggagcaga 360
 tgcagaagca gcgggtcgac gcaggtggat gtcctcctgc ccggcgtggt gattggggctc 420
 ctggccttta gcctgct 437

<210> 4639
 <211> 437
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-052-Q1-E1-F6

 <400> 4639

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 gcgccccgcc cctccccac gctggccgca cccgcaatgg ggtgcgcggc gtcggccgcc 120
 aacggggccg ggccccggcg gcgggggtgg gcgcggggcg ggatgcggcg gtacagcgag 180
 gcgtccacct cgggtctgcc gccgccgccg ccgccgccgc aggaggcggc ggagtcgtcg 240
 tccgggggca ggaggcgagg gcgcaagggtg gcgccggagc ccaaggagcc ggcgaggag 300
 gggaccgccg cgctgccgcc gatgcccggc tcgccagct tcaggtacta ctgccagaag 360
 aagacggcgg ccgtcgacag gatcgtggcc gacgccgacg ccgccgacgc cgatgactcc 420
 gtcagggtca gagcgac 437

<210> 4640
 <211> 437
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-F7

<400> 4640

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accacttcgg caaggggctg gtgcagcgga tgccgcgctg ccgtcacggc ttcttccacg 120
tggtgaacaa cgactacacg cactgggtca tgtacgccat cggcggcagc cggaacccca 180
ccatcatcag ccaggggaac cgcttccgcg ccgtcgacga cagcaggttc aaggagggtga 240
ccaagcggga gtacacgcag tacagcgagt acaagaactg ggtgtggaag tcgcaggacg 300
acctgttcct caacggcgcc ttcttcaacc agtccggcgg ccagaacgag cgcaagtacg 360
acaggctcga cctcatccag gccaaaggcg gccagtagcg cgagtcgctc accagggtacg 420
ccggcgcgct caactgc 437
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<210> 4641
 <211> 379
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-052-Q1-E1-F8

<400> 4641

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cgcccttcta cctcgctcgc ggtgcttcca agctagtgag aaggattacc tcggagacat 180
cggtcgagct caagattcta tctgataaat ggcggcttct cctcgctggc ctcatTTTTcc 240
agtacatata tggtttgccc gctcatgggg ttattatct gcaccggccg ggccctaccc 300
ttcaagatct tggcttcatt attcttccgg agcttgggaa agaanagggt tacatcagtg 360
agacattggt tacattcgt 379
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<210> 4642
 <211> 452
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-G10

<400> 4642

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gcgaagatgg tcgccaagaa gggcgccgcc gcggtgagca agctgctggc cgactccgtc 120
atcctcatgg gcatcgccaa caacgacctg ttcgtgttcg ctgccgccga gctgttgagg 180
ggcaggtcgg ccgcgagga gaagagcgac gccgcccgt tctcaccga cctgctgtcc 240
aactactcgg ccgccatcac ggatctgcac tccatcgagg cgaggaagtt cgccatcacc 300
aacgtggggc tgggtggggg cgtgccgggt gtgagggtgc tggacgcgga cggcgggtgc 360
gccgaggggc tcaacaagct ggctgaagcc ttcgacgtcg cgctggggcc gtcctcggcc 420
ggcctcggcg acaagctgcc gggggctgac ta 452

<210> 4643

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-G4

<400> 4643

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ccttcgcggt ccacgccgcc aagcgcttcg ggcagcgctt ctcttctgtc ctgctcagcg 120
ccaacagctc ccgcgacgcc tccagctacc tcaccttcgg gcccaaccgg gcggtgatgg 180
gtccgggcac catggagacg gacatcctgt acaacgtgga cgtgaagcct gcatacgggg 240
ccaaggtgac gggcgtcttg gtgggcgggg agcggctgga catcccggac gacgtgtggg 300
acgccgagag gtttgtgggc ggcggtgtca tctagacac gagcacgtct gtgacgtcgc 360
tggtgccgga agcgtacgcg ccggtgactg gcgcgctgga 400

<210> 4644

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-G5

<400> 4644

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cttctctttt aaacaacagc gaagtctcac tctagctata tatggagatg aagaagatgg 120

agaaggagga tgacaccatc attgttggcg ccagcatcac tgtcgtaata gggtagtggt 180

agcaaataga tatcacggtc caatgcatgc atgtgtaatg cattgcttgg gatccaaccc 240

aatctagtat agctagcata ggtcggctta aagtattgtc agcactaaag ttaattattt 300

ggcgggtgtag gcggtgttgg ccttccagtt ggcagggatg acatcgctcg agacggactt 360

ggtgcctccc tcggtagtga ggcggacggg gaggggtccc ttaagcggtt tgctgctgtc 420

cttcct 426

<210> 4645

<211> 231

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-G6

<400> 4645

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cttcgcaaga cgtctcgttg gtccatccat cgactctgag gctgccaacg gctggacatg 120

catgagctgg acagcgagga tcacattagg gttgttgccg ccagtaatag cgccggacac 180

gattgctact gccacttga aggcagggga catgtcaggt gtattttctg c 231

<210> 4646

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-G7

<400> 4646

ccacgcgtcc gccgccgcc cgccctccc ctctctctgt ctgccgcc ggggagaagg 60

agggtccgc cgctcccggg gaagagcgcg ccattgccgc cgccgcgctg actggggaag 120

atggttgctc aggagtccac agttgatctc aacaagcccc ttgttttcca ggttgccat 180

cttgaggaac ggtaccagga atgggttcac caaccgatcg tcagcaagga gggtcacgc 240

tttttcggaa atgatgtcct ggagttcttg actcgcacga agtgggtggc tgtgccaaact 300
 atatgggtgc ctgttgctcg ctgcctgctc gtgaaatcta ttctgatggg tcataccggt 360
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 ttg 423

<210> 4647
 <211> 413
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-052-Q1-E1-G8
 <400> 4647

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 catcatcggc gacgtgccgc cctccatgtc cgcgcccacc aagatggccc ccaacgtcat 180
 ccgcgcgcgag ttccgcacct tcatcgaggt ggtcttcgag aaccccgaga agagcatcga 240
 caccatccac atcgacggct acgccttctt cgcgctcggc atgggcccgg gcaaattggac 300
 gccagcgtcg cggagcacgt acaacctcct ggacacggtg agccggcaca cgatccaggt 360
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<210> 4648
 <211> 457
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-052-Q1-E1-G9
 <400> 4648

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 ccgtccaaa caggatgata gtatccaacg aagatatcaa catccttgtg cgtgccaaagg 120
 cgcacatgct cgtcgcgctg aagctcgacc gctgctccgg cttctccact cctccatcg 180
 cactcgtcgc ccgttctgc aggaaactgg aaacactttt cctggaagaa agcacaattg 240
 atgagaaaga aaatgatgag tggatccgtg agcttgctac gagcaattct gttcttgaga 300
 cactgaattt ctttctaaca gatctcaggg catccccaga gtatcttacc ctcttctgtg 360

gcaactgtca acgattgaaa actctgaaga ttagtgaatg tttcatgcnc gatctgggtca 420
gtttgttccg aactgcacaa acactacaag agttcgc 457

<210> 4649
<211> 436
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-H1

<400> 4649

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cgtgctagcg gtggccgccc atgtcgccaa cgccggccac gccaaagcccc taacgcctgg 120
cgggcgcgtg gtacacgaca accacggcaa gttcacggcc gggccgtgga aaccgcgccc 180
cgcaaccttc tacggcgggc gtgacgggtc cggcaccacg gcgggcgcgt gcgggtacaa 240
ggacacgcgc acgcaggggt acggcgtgca gacgggtggc gtgagcactg tgctgttcgg 300
tgacggcgcg gcctgcggag ggtgctacga ggtgcgggtg gtggacagcc ctagcgggtg 360
caagcccgac gcggcagcgc tgggtggtgac ggtgaccgac ctgtgcccgc ccaagggaca 420
atggtgcaag ccacgc 436

<210> 4650
<211> 434
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-052-Q1-E1-H12

<400> 4650

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gtcatttggg tgcggcagat gctccaccgc tggcagtcct ccagctccag gattgccgcc 180
gagaggaggt ccagcgccag cgacgacggc gacagagcca acccagacga cgccaacgcc 240
acgacagacc aaagcagcaa cggcgacccc acgcctgccg ctgcagacaa tgccagcagc 300
agcagcagca gcaggaacca gatgctgccg gcggcgccgc atggtgcggc ggacgaagag 360

gacgangacg angaccggcg gctcctgtcg cgggtgctgc tgggtgganga ggcgaggcng 420
gggtgcccc ccga 434

<210> 4651
<211> 416
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-052-Q1-E1-H2
<400> 4651

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agcatcatca caataatggc ccgcgcgtgc gtgttcctcg tgggtgctcct cctggccgcc 120
gtcgcggtgg cgccgtttgc gggggctgcg cgtgtggacg tcgtggaggg caggtccatg 180
gcgtccgccg acgcgcctga agcggcggtc gacgcgcccg ctcccgggcc cgactccgcc 240
tcatccccgg actcctcgtc ggaggcgccc tccagcagca gtcatccga ctagccgcgc 300
acaacgcagt tcttgtcatg atctatctat cacataaaaa gatcatatgt ctcgtttgat 360
tctctggaat aactaatagt atatatgctg cgcccggtatg atatataaat atgtgc 416

<210> 4652
<211> 439
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-052-Q1-E1-H3
<400> 4652

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ggcggcggtg gcggtggcgg gagggcgccc gtcggtgccg gcgggtccgc tggacatcgc 180
gcagctgggc gccaaaggcg acggcaagtc ggacagcacc ccgatgatcc tcaaggcgtg 240
gaagaacgcg tgcgaggcga cgggggtaca gaagatcgtc atcncgccgg gcaactacct 300
gacgggcggg ctggagctga agggcccctg caagtccctc atcatcatcc gtctcgacgc 360
caacctgtc gccaccggcg acctcagcgc gtaccagagg aactggatcc agatcgagaa 420
cgtcgagaac ctgtccatc 439

<210> 4653
 <211> 413
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-H5

<400> 4653

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ggggaggggac gagaggttcc cagtgtggga ggccgcgctc ggcgctgggg tcgccgccgc  180
cttcgccgct gggctcgtcg gggtttacct ttccatgccg gactccgact acagcttcct  240
caagctgcc aagtaatctcc aggaactcga aatcctcact ggccatcttg agaactatac  300
taccgactac accctacagg tgttggtacg ctactgcgcc gtgtacatct tcatgcagac  360
cttcatgata ccaggaacga tattcatgtc actgcttget ggtgccctgt ttg           413
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<210> 4654
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-052-Q1-E1-H6

<400> 4654

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gccggcgcac gtcgccccgg ggctcacgct caccaccgag cccaaccaa ttaataatat  120
atatatatag ctaggatcga tcgtcagtaa aatggcaggc tccgccgtcc tgaggagccc  180
cctgtccgtc ctctctaca tctcgcgcgc cgtgcccgcc accgccgcgg cgacgccgac  240
cgacgccgcc atcgacgagg cgtacgcgca tctcgtcaac ctcaccgcta accaggagta  300
ctggggcggag cgcgcggagg cggcgcacgc gtacaaccgc gcggcgtacc agaccgacct  360
cgtggccgtc gtgcagcgt tcaacgacgg cgtgcacagg gcgacggcga cccggtcgcg  420
gtccctg                                           427
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<210> 4655
 <211> 251

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-052-Q1-E1-H7

 <400> 4655

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 aggtgtactt atgtgggttt tggggcggca agagagtttt tttttgtgaa ctctgggtgta 120
 tcggatcaag tgaatatgta cctacatgtt gtgttcttaa ttctgcattg tacagctata 180
 cactatacaa gggcagggga atgctgaggt gtaacttcca tgcaatatac ttagttctat 240
 tcactctaaaa a 251

<210> 4656
 <211> 295
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-052-Q1-E1-H8

 <400> 4656

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 ctgtactgta catgaagtct cttttctttt atataccatg gctaaggggg tgttgactaa 180
 gggcctgttt gtttacctcc cagattatat aatctggatt aaataatcct aagaggcaaa 240
 caaacagtct agcttatttg ccagattat ataactaac cccttggtt atgat 295

<210> 4657
 <211> 439
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-052-Q1-E1-H9

 <400> 4657

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 ctccgcgcgc ggccgcgcgc atcagggggc ggtgcagcgc gctcagcttc gcggcggcgc 120
 gggaccgctg cttcagccac cgcttccgca gggcggggct gcgcccgtc gccgtgccgc 180
 tccttgcccc gggcccagc cccgacgcgc acccgccac caccgtccac atgtgggtgc 240

ccgcggggccc gccgccgcgg aaccgcgtgc tctctctgca cggcttcggc gcctccgcca 300
 cgtggcagtg ggcgcctac ctccgccgc tgategccgc cggcttcgac cccatcgtgc 360
 ccgacctct cttcttcggc gcctcctgca cgcgcctccc cgatcgctcc gacgccttcc 420
 aggcttcgc catcaaggc 439

<210> 4658
 <211> 295
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-053-Q1-E1-A1

<400> 4658

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 aagtcaagcc cagaggatcc aactgcatgg acttggtga tcttgcgct caatactacg 180
 tcgacgctta gctgaaccag ccaaactgta tgaagaccat ccgtgccaac acaaggctca 240
 cgtacagatg ggccagatgc aggggcacgt tctagaagct gctcaagttc ggtga 295

<210> 4659
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-A10

<400> 4659

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 caagcgggcg atatacatgg aactgacaca ttagattgtg aggaatttgt gacagtcttg 120
 cttcacatta aaaagatgag taatgacgag tatctaccta aagctttcga gttcttcgac 180
 aaagacggga atggttttat tgaaatgtcc gagttaatgg agactctaag tgatggtgaa 240
 ctaaagcctg atgagcaatt ggttaacgac attattcaag aggttgacaa ggataaggat 300
 ggtcgcatca gttaccaga gtttgaattg atgatgaaaa gtggatcgga ctggaggaa 360
 gcctctagac gttactcaac agagaatttc agcagcctca gtcaaaaact gtgcaaagat 420

actttatgaa acaa

434

<210> 4660

<211> 457

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-A12

<400> 4660

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gctgtctggtc gccgtgctag cgggtggccgc cgatgtcgcc aacgccggcc acgccaagcc 120
cctgacgcct ggccggcgcg tggtagacca caaccacggc aagttcacgg ccggggccgtg 180
gaaacccgcc cagcgcacct tctacggcgg gccggacggg tccggcacca cggcggggcg 240
gtgcgggtac aaggacacgc gcgcgcaggg gtatggcggtg cagacgggtg ccgtgagcac 300
gggtgtgttc ggtgacggcg cggcctgcgg cgggtgctac gaggtgcgct gcgtggacag 360
ccctagcggg tgcaagccca gcgcggcgac actggtggtg acggcgaccg acctgtgccc 420
gcccacgac cagcagtcgg cggacacggg cgggtgg 457

<210> 4661

<211> 378

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-053-Q1-E1-A2

<400> 4661

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tgataccacc accgtagcac cacacgcacg tacgaagaag gcgacgaaca tggcgaggct 120
gggcttggtg ncggccgtgg ttctgtgcct cctgttagcg acagggccgc atggggccat 180
cagcgcggag gggatggtgt catttgacaa ttgatcagc tgcaaggtac tgggcaactg 240
cgacaagaac ctgagccccg aggcctcccg cccaaggaaa accgccaacg actacacccg 300
cggctgcaac ccgattaccg gctgtcgcg ctgatcatat ctctctggtc gatgtgcgcg 360
caatgtcaat gtcgcacg 378

<210> 4662
 <211> 417
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-A4

<400> 4662

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 cggaatgcga ggtcaggatg aaatctgtgg agaggcagat cacttcgtta cagatggctc 120
 acagtcacag ccagaccgct ggcgtaagcg taaggagaga tggatcgacg aggcacatcc 180
 agggatcatc tcgtggaggc cttccgccgt cgtctcagcc atcgtcagtg aggcgccagc 240
 agcgcgggtc cgagcccgcc gctgccgacg agagcgagaa gacgacactg gcggagccgg 300
 tagtgaacca gctggccagg gagttccaga cggggaggga ggcgttcgag cacaacgcgc 360
 gcgcggtggc ggaggccagc aggctgccga cgtcgtcgtc cactcctggc aacgcca 417

<210> 4663
 <211> 354
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-A6

<400> 4663

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 cgcgtctctt cataggccaa gctgctgacg agaaagggtg actcaagacc gatgcattct 120
 tcgaaacaag tgtagccggg gtatacgca tcggcgacgt ggccaccttc cctctgaagc 180
 tctacaacga gcagaggaga gttgagcacg tggaccacgc ccggaagtcc gccgagcagg 240
 ccgtgagggc aatcaaggcc aaggagtccg gcgaatcggg ggccgaatac gactacctgc 300
 cctacttcta ctcccgtcg ttcgacttgg cgtggcagtt ctacggcgac aacg 354

<210> 4664
 <211> 395
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-A7

<400> 4664

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 cgggctccgg ggatgcgagc ccgccccgt geetccgcg atgctcctcc acctcaaccc 120
 cggcaccttg ttctcaagg ccggcgctc ggcaggctcg gcgccaattc caaaaagcg 180
 gcccgcgcca accggcccgg tcctggaacg gctatgaag gacttgcgca gcatctacac 240
 tgtcggcaag gagctcgggc gtggccattt cggcgtcacc agcctgtgca cacacagggc 300
 taccggagag cgcttcggt gcaacactat tgccaaccgg aagctctcca ccaaggagga 360
 cgtggaggac gtgcggcgcg aggttcagat catgt 395

<210> 4665
 <211> 434
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-053-Q1-E1-A8
 <400> 4665

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 gccgtcctcg tcgccgctc ggccaccgtg gcgctggccg cggaggcgcc ggctccgtct 180
 cccaccagcg gtcctccgc ggtcgcacc gccatcgctg gggccgccgt ggctccttc 240
 ttgcgtact acattcactg agccgccgga cgaggagccg gagccggagg gaagagacca 300
 aggtgggggg agagacttgg ctgcgtgct ctgctctgct gctcccgcg attcccgatg 360
 cgtgggcgtg ctctgattgg gcacggcggg ggcagtggca caccttcgtc ttccttttgt 420
 ttgttttttt ccct 434

<210> 4666
 <211> 446
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-053-Q1-E1-B2
 <400> 4666

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anaaggtcga gaggagaaga aggcgagacg tgcagtcctg cgggcaccga tcgagaacag 120
ggaagcaaga ggctgctaga gatcgagctc atcaaccaac caagtcgtac gtcgtcagca 180
tcacgaccgg atggcgctg cgcgtccag ctatgtatcc aggagggggc tctccgcagc 240
gatgacggtg gccgaggagt ccgtgaagaa ggtggaggac aaagcngtga agctgggaac 300
tgtggccaag gacatcgcca gcgccatggc caccacgacg gaggagaaga cggcgttctg 360
ggaacctgac cccgagaccg gatactaccg ttccggtcac ggcacgaagg aggtggacgc 420
cgccgaactg cgcgccgaga tgctca 446

<210> 4667
<211> 134
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-B3

<400> 4667

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gtgtacctcg tgatccgcat cgacatcggg catcggctca gcgtaggctc caacgtgttc 120
ccctccaaca cgct 134

<210> 4668
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-G12

<400> 4668

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agtgtctctg actctttcct gcagggcgga tatactcgca agcgttccac cttgcagggc 120
agggtttctt cctctcggct cactgtaaca tggagcagca aagcgcgttc tactgcttcg 180
ggctcttcct gtggatgcaa gagaatggct ccacgagtgt gacagtggac tacgagttcg 240
ctgcaaggac gagaccatcc ggcgagtttg tgagcaagta caagggtaac tacacattca 300
ccggtggaaa ggctgttgga tacatgaatc tctttgcaat cccatggcag aagttcttgg 360
ccgatgacag cctcttcttc gtggatggga tgctgcatct gagagccgag cttacgataa 420

agcaaccct

429

<210> 4669

<211> 375

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-G2

<400> 4669

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ccccacggag ggaaggatgg cggagcccaa agcggcggcg gcggcgagga agacgcgggt 120

gggcccgtac gaggtcggca agaccatcgg cgagggcagc ttcgccaagg tcaagcacgc 180

gcgcgactcc cgcaccggcg ccgtccgcgc catcaaggtg ctcgaccgca accacgtcct 240

ccgccacagg atggtcgagc agatcaagcg ggagatttcg actatgaagc tgatcaaaca 300

tcccaatgtg gtacagctgc atgaggttat ggcgagcaaa acgaagatat acatggttct 360

tgaatttggt gatgg 375

<210> 4670

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-G3

<400> 4670

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agtgttgacag tttataactg caatggttgt tatggacaca tggcagtact tcatgcacag 120

atacatgcac attaacaagt ttctgtataa acacatccat tctaagcacc atactcttgt 180

agtccttat tcctttggag ctctatacaa ccacctcctt gagggcctta ttttggacac 240

cattggtggt gcactctcat tctcgtctc tggatgact ccacggacat ccatattctt 300

tttctccttt gcaaccatca aaactgtgga tgatcattgt gggctgtggc ttcttggtaa 360

tatcctccag gcgctgttca gcaataacag tgcttatcat gaacatcaca atcagctcta 420

tggaac 427

<210> 4671

<211> 408
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-059-Q1-E1-G5

 <400> 4671

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 ctgaggccgc cgtctccaca cccaagggtg cgcccgaggc cactccaatc tccgttgagg 180
 ttgcggtga tgaacaggta gctgagaagg tgggtgtgga ggagccggct gcggcgggccg 240
 acgttgagca tcagaaggct aatgagggtg tcgctccaga ggccggccgtc gccgagccccg 300
 accacaagga ggaggaagcc gtggagaaga ccgtcgtcga ggaggagaag ccagcggcag 360
 cagcccatgc agaggaaaag gtcgccaccg ccgccgagaa cacgacga 408

<210> 4672
 <211> 431
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-059-Q1-E1-G8

 <400> 4672

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 ccagcttgct cgccgcgccc gtccttcttc ctgcctccg ttccattccg tccgccectc 120
 caccgccgcc gccgcattca gggatggaga tgaagaagat cgctgcgcc gtcctcgtcg 180
 ccgcctcggc ggccaccgtg gcgctcgccg cggaggctcc ggctccggcc cccaccagcg 240
 gtcctccgc cgtcgcgccc gccgtcggcg ccgccctcgg ggccgcgctc gcctccttct 300
 tcgcctacta cattcagtga gccggccggg gcgcccggag gccgacgaag agacgaaggg 360
 gagagagagt gacatggctg ctgcattcc gatgcgttgg ccaggttttt ggatccgaca 420
 caccttttgt c 431

<210> 4673
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-G9

<400> 4673

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gcctggtgaa cgcatgatg gacctgcagg agggggcgct gatgctgctg ggccccacga 120
tgaacgcaa ggtggcggtc gagctgtcgg agcggctgcc gcacctgcc ctgcggatgc 180
aggagcactc gcgcgcgcgc ctggcggttc cgcagcggat gcaggggctg ggctgcgcgc 240
tgctgtacct gggcctcccg ggccaccgc accacgcgcg cctggccgcc atgggcaacc 300
cgggctacgg ctgcggcgc atgctgtgcc tcgacatggg caccgaggag cgcgccaacc 360
gcctcatgca ccacctccag aacaccaccc ag 392

<210> 4674

<211> 380

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-H1

<400> 4674

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ccgttcgttc gattcgttct ttccgccatg gaggtctgga ggaagccgc ggtgtgctgt 120
gcccttcttg tgctgtcat cgtcgctcc agcgaacgg tgctgactgc tcatgacgag 180
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tgccaggatc acggccacgc ggacggccgc tgcaactggg catggctctg gaggcgtat 300
tgccagtgcc tggtggcgga ctgccaatag gcgcgaacag ctgcgtcgca tggcgtcctg 360
gctgcctcgc cggccgatga 380

<210> 4675

<211> 417

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-059-Q1-E1-H10

<400> 4675

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aacccgcgcc tcagcgagaa ctgcaagagg tccctgcaccc ctctctcttc ttgaagcgaa 120
 gccccttgaa atgaatgaac catgcatgca tgcatttatg catgcgccgg ggtgacgtgg 180
 cgttcagctc aggcgctgag cgagctctata cgtacgtcgt caccggctgg ccacgcatgc 240
 gataaccatc tgatatggac ggaactatat attgtattcc tattaatctg gcatttttcta 300
 agctaattgt ttttttccaa atataccgtc gatggaactc caaatgtaat gtcacgcana 360
 tgtgtgtntt tcatcgattg aatgggtaat aataaaaagg catgctggca gttacta 417

<210> 4676

<211> 353

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-H11

<400> 4676

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 gagtagcact cctcgggtcc tgggttcgac ttcccgctgg agcgaatttt agactgtggt 120
 taaaaaattc ccctcgtctg tcccacgcca aagcacaggt ctaaggctta gcccggctcg 180
 tggtcgttct cacatgggct tcaatgccgc tgtcgtaccc ccccccccc ccagtacctg 240
 cacgtcaggt ttttttttca gcaaattcca tctgataagg taagaaattt ataattgtaat 300
 tctattaat ctggcatttt ctaagctcat tgtctttttt ccacatatac cgt 353

<210> 4677

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-059-Q1-E1-H2

<400> 4677

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 tctctttctg catcgtgcat ggtgagaagg aagagtcaaa gggcatcgat gcgaaagcgt 120
 ccgggcctgg tgggtccttc gacatcacca agttgggcgc ctccggcaat ggcaagacag 180
 acagcacgaa ggctgtgcag gaggcattgg catcggcgtg cggcggcact gggaagcaga 240
 caatcctcat acccaagggt gacttccttg tcggacaact caacttcaca ggcccttgca 300

agggcgcagct gaccatccag gtggatggca atctgctggc gaccacggac ctaagccagt 360
acaaggacca tggtaattgg a 381

<210> 4678
<211> 425
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-059-Q1-E1-H5

<400> 4678

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ggtcaacacc aagatcaagc tggagccggt catggcgccg tcgtcgtccc tgccgcggag 120
cgccagcgag ctacccgacc cgccgtcacc gttcagctcc aacacggcgc accaccccg 180
ctccgtgccc accacaccta ggttgctcctt atcgtgctcg tcgttcggcc acatggtgac 240
cccgccacc gacacaccgc cgatcacgcc caccaagaag caggacgaca agccgaagcc 300
gacgccggag gccgccaccg cggcgaacta cgcgtcgttg tggtcgccc agcgctcat 360
gcagcgcgt gccgcgctt tccgccgcag caggttnccc gccgcgtca ggacggtcaa 420
ggacc 425

<210> 4679
<211> 412
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-059-Q1-E1-H6

<400> 4679

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ggccgacaag cccacgtact ccacgttcct gaagctcctg caggacacca aggtcgcggg 180
cgaggcgaat cagctccggt cggcgacgct actggctcgtc cccgacaaac ttgccaagcc 240
tctggcgtcg ctgcccgcg ataaggtgcy gccggcggtg gagaaccacg tccttctcag 300
ttacttcgac cccatcaagc tggacgagat gaagacacgc accgccatcc tccccacgct 360

gctctccgtc ancgacaaga aactcggcgt cctcaactac accagggccg ac 412

<210> 4680
<211> 416
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-059-Q1-E1-H7

<400> 4680

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atgacgacac tgcttggggg gactacgcca gagcaactct tagatgcac cctgcggatt 120
acagcgggtga aggcagcgat ggcggagatg aagctagaca atgcaataaa atcaggcagt 180
gtcaggggta acccgatgat gtcgtcgcta aagacatgca aggagagcta cgcgtcgctg 240
gtagactcca tcaataccac gcggaacacg ctcaaaagcg gcggcagcaa tgcagacctc 300
atgtcggagc tatccgcggc ggacaccttc gccaccgact gcggggacac cttegacgag 360
cgaacagacc tcaactcacc catacccggt gcacagcgcc acgtcanacc gctcat 416

<210> 4681
<211> 416
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-059-Q1-E1-H8

<400> 4681

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gcggggcgcg gcgctggcgc ggggcgcggg agcaggcatg gcgtcgcagg tcgctgggtc 120
aaccgccgcg gtggcggcgc ttgggttcct tctcccgacc ttctgggaga tcgaggtcac 180
gtgcgccgcc gcgatgatcc tcgtggcgct ttacgttgcc tacgagctcc tcaaccgcg 240
ctcctcgcag gcggcagcgg cgggcgacgc cgacgagctc ctctgcggg ggctggacgg 300
cgccgacaag ttcaaggggg gtgtgagccg cccctctgcc tatgtantga agctcgaatt 360
gttggctgca caaaatttga tggcggcgaa cttaaatggg acatctgacc catatg 416

<210> 4682
 <211> 442
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-059-Q1-E1-H9

 <400> 4682

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 tcgaggggcca gccaaagctt gccatggcgg ccgtccgggtc cgacagggtc caccaccacc 120
 accgcccgtc cgaggcgtcg tgtccggcaa cctccgcggc cgtggcgggc gcgagggccg 180
 atgacgcctt gcgccagcgc ccgcgggggc tcgtgcaggt ccgggagcgg gaccagggcc 240
 cgctgtcgac ggggcaccag cacctgcacc accatcagca ccagctcggc cggtcggcgg 300
 cgttcccacc ccgccgcccg gggccggggc gccgccctcc tcagcgtgc gaaagcgacc 360
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 ccgctgtgtg ctgctgcttc cc 442

<210> 4683
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-060-Q1-E1-A10

 <400> 4683

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 gcctggtggg tccttcgaca tcaccaagtt gggcgccctc ggcaatggca agacagacag 180
 cacgaaggct gtgcangagg catgggcacg ggcgtgcgcc ggcactggga agcagacaat 240
 cctcataccc aagggcgact tccttgctcg acaactcaac ttacaggcc ctgcaaggg 300
 cgacgtgacc atccaggtgg atggcaatct gctggcgacc acggacctaa gccagtacaa 360
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 aaaccttgac gggcaaggcc 440

<210> 4684

<211> 428
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-A12

<400> 4684

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catactgcct tcaatacatg caccatgagc tcagtcacc tatggcgatc cagcagctgc  180
ggtctgacac aaccttcatt tcagatgatt atgctgccaa gattgcagat gttggtgtat  240
ggaacgagct tgctgccaaa gcgaaggctg gaaaggagga cggcagcagc cgtgctgaag  300
ctcctccgga tctcccaagc aacgcctact gtttcggcgc gtcctatgat gagaccatat  360
ccgggagggg tcttgacccg tatgatcaca aacctatg cagctgggct tctgagcatc  420
tgaaagac                                         428
  
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<210> 4685
 <211> 420
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-060-Q1-E1-A2

<400> 4685

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tcgggggatg ccgtgagcga cgagtgaag ctcaagttcc aggagctcaa gtcgaagcga  180
agcttccggt tcatcacgtt caagatcaac gagcagacgc agcaggtggt ggtggacagg  240
ctgggggcagc cgggcgacac ctacgacgac ttcaccggct ccatgcccga gagcgagtgc  300
cgctacgccg tcttcgattt cgacttcacc accgacgaga actgccagaa gagcaagatc  360
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<210> 4686
 <211> 432
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-060-Q1-E1-A4

<400> 4686

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gcttcgagat caagtgcgat aagcctgtgg agtgctccgg caagcccgtg gtggtgcaca 180
taacggacat gaactatgag cctatcgcg cgtaaccactt cgatttagca agcacggcgt 240
tcggcgccat ggccaagaag ggcgaggagg agaagctgcg caaggcgggc atcatcgaca 300
tgcagttccg aaggggtaag tgcaagtacg actccaaggt caccttccac cttgaaaagg 360
ggtgcggccc caactacctg nactgttgg tcaagtacgt cgacggcgac ggtgacattg 420
tggcagtgga cg 432

<210> 4687
<211> 450
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-A6

<400> 4687

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tttatgtttg tgttccaata tgggtgtagt ggtgcccga tcgctcatgt tatatcacia 180
tatttcattg catccatact cttatggaga ttaaggttgc atgttgattt gttgccacct 240
agcttcaaac atctgcagtt tggccgattt cttaaaaatg gttttctgct acttgcacga 300
gttattgccg caacttgttg tgtgacacta tccgcttcaa tggccgcacg gctaggttca 360
actccaatgg ctgcattcca gatctgcttg caaacctggg tggcttgctc acttcttgcc 420
gatggattgg cttttgctgg acaaatgcat 450

<210> 4688
<211> 390
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-A7

<400> 4688

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aagaacatgg ccaacatctt catgtacggc gacggggccga cacagacggg ggtcaccggc 180
gacaagagca acgcaggcgg cttegccacc ttgcgctcag ccaccttctc tgctgagggc 240
aacgggttca tctgcaagtc gatgggggttc gtcaacacgg cggggccgga ggggcaccag 300
gcggtggcga tgcacgtgca gggcgacaag tcggtgttct acaactgccg gttcgagggg 360
taccaggaca cgctgtacgt gcacgccaac 390

<210> 4689

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-A8

<400> 4689

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caatatggtg ttagtggtgc cgccatcgct catgttatat cacaatattt cattgcatcc 180
atactcttat ggagattaag gttgcatgtt gatttggtgc cacctagctt caaacatctg 240
cagtttggcc gatttcttaa aaatggtttt ctgctacttg cagagttat tgccgcaact 300
tgttgtgtga cactatccgc ttcaatggcc gcacggctag gttcaactcc aatggctgca 360
ttccagatct gcttgcaaac ctggttggtt tgctcacttc ttgccgatgg attggctttt 420
gc 422

<210> 4690

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-B10

<400> 4690

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tctgcgccac catcggcgag cctccctcca cctgtcacac ggctgtctcc tcgctccagg 180
gcacagggag cctcaaggag gagctgggcc tgatcgcgcc ggagctggcg gagatgaggc 240
ggaggagggg cgagaggcgg cgcgagttcg cagacgtcac ccagcgggtc gccaggatcc 300
aggaggagtt gaacctgcag ctaggtggcg ggcagggccca gtctgaagct cacgccgcgcg 360
ccgtcatcgt cgacgtcgac ggctccgacc tgacgacgac caagctcgac gagctccgag 420
cctatctgca gca 433

<210> 4691

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-B11

<400> 4691

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ggcgccggcc gccgcgaacg cgcccggcgg ggcgttcagc aactgggtgg cgatgaacca 180
gcagagctac gcgctgtacg cgcagaagtc cgtcggggac gggggcaagg agcccctgga 240
caagaagctg tcggaggcgg agaagaagaa ggtcacgtac gtggtggacc ccagcggcaa 300
gggcgactac accaacaatca ccgcggcgct ggaggatatc ccggtgagca acaccaagcg 360
cgtgatcctg gatctcaagc ccggcgctca gttccgcgag aagctgttcc tgaacatcag 420
caagccgttc atcacgtt 438

<210> 4692

<211> 217

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-B12

<400> 4692

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gtagaatttta tttggttttg cgctggcgat ggggtcggga gttgtcgcgt gggctagttg 120
ggccgcgggtt ggtgatccgg cccactattc ctcccaaacc ctagccgccc tccctcctca 180
cccccccccc tttgtgcagc cgccccccca cttcccc 217

<210> 4693
<211> 428
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-060-Q1-E1-B2
<400> 4693

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gtggtggaca ggcttggggg accaggtgaa agctacgatg cgttcagggc ctgctttcnc 120
gccaacgagt gccgctacgc ggtgtttgat tttgactttg tctactgatga gaactgccag 180
aagagcaaga ttttcttcat ctcttgggcc ccagatgcat cgagggtgag aagcaagatg 240
ttgtacgcaa gtcceaagga ccggttcaag agggagctcg acggcattca agtggagcta 300
caagcaactg agccgagcga aatgagcatg gacatcatca agtcgcgagc cctctgaaac 360
agcccggcag cagctcctgc atgcccgctg attccttcgg tgttggtaac ggtcatccgt 420
tttcgtgt 428

<210> 4694
<211> 74
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-060-Q1-E1-B3
<400> 4694

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gccgctctag agga 74

<210> 4695
<211> 414
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-060-Q1-E1-B4

<400> 4695

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cgcaactgga ctctctttcc tcgaccaagc gaagccagaa ccacttgtcc accgggacct 120

gaagcccgcc aacatcctcc tcgaccacaa ctctgctcagc aagatcagcg acgtcgggct 180

cgcgaggctg gtgccacagt ccgcggccga cgtcacgcag tacaggatga catcgacggc 240

cggcaccttc tgctacatcg acccgagta ccaacagact ggcattgctca ccaccaagtc 300

cgacgtgtac tcgctcggca tcatgtgtct ccagatcatc acggcgaggt cgcccatggg 360

gctcacgcac catgtggaga acgcataga gagaggagcc ttccaggaga tcct 414

<210> 4696

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-B5

<400> 4696

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cagcaacctt acccgagccg actccgggac accttcgcc cgccatgcc cgaccacgcg 120

ttccgactcc tcgccatgct cctctccctc gacctgccg cccgcggcac cgctgccgcc 180

gccctcgacg ccgagtactt cagcagggca ccgtacgcag gcgaccccg gagcctgccc 240

aagtacgcgc ccaacaagga gatggacgcc aagttccggg aagaatctag aaggaggagc 300

aacctccgga gccaaaggcg cgagggggcg aagcggctgt cctgggggca caagagcatg 360

cagctgcagg acacgaacca gagccacgtg cagcccgagg aatcgctgcc cgttgtggcc 420

aaaag 425

<210> 4697

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-B6

<400> 4697

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 cgagcgggga ggcgcacggc gtcgcgcagg ccaccgggtc gctggtgcac gagggccgcc 360
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 tgtacatac 429

<210> 4698
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-B7

<400> 4698
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 gagagcctca aggcggggga tcatatctac tcctggaggg cggcgtgggt ctacgcgcac 180
 cacggaatat atgtgggcga tgataagggt atccatttca caagaggaag aggacaggag 240
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 acgccttgcc cgggtgtgcac cgacgaaacc agcgacagca gcacagagac gaacggcggtg 360
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<210> 4699
 <211> 393
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-B8

<400> 4699
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 cttcttcggc tggctgggag acaagctcgg gcgcaagaag gtctatggca tgacgctcat 180

gctcatggtc ctctgttccg tcgcgtcggg gctctcgttc ggccacaccc cggcgtccgt 240
catggcgacg ctgtgcttct tccgcttctg gctcgggttc ggcatcggcg gcgactaccc 300
gctgtcggcg accatcatgt ccgagtacgc caacaagaag acgcgcggcg cgttcatcgc 360
cgcggtgttc gcgatgcagg gcttcggcat cat 393

<210> 4700
<211> 436
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-B9

<400> 4700

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tgaccccaag aagtaccgca agatgaagga gaggtctgtc ggcgtctctg aggagaccac 180
cacgggtgtc aagaggctct accagatgca ggagaccggc gccctcctct tccttgccat 240
taacgtcaac gattccgtca ccaagagcaa gtttgacaac ctgtatggtt gccgccactc 300
actccctgat ggtctgatga gggccaccga cgttatgac gccggtaagg ttgccgtggt 360
ctgcggatac ggtgatgttg gcaagggttg tgccgtgca ctcaagcaag ctggtgcccc 420
tgtcattgtg accgag 436

<210> 4701
<211> 444
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-C10

<400> 4701

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acgcatttag agggccggga tcgtcctgga gattcgtcgg cacaatcaga tacgccgaat 180
cctaaaacgg tccaggattt ttgagttgga aactgtggga aatgcgggat atgatggtga 240
gcagatattt gcaaatgtat ccttggaag atgtttcgga agatttcatt gcaatgggtt 300

ttcaaaattc tccgtttatt attctatgtt tgtagctgt taaccgttgc ctagtgtcta 360
cgtattgtca aaccttctta cagtagaagt caacgctatg caccaagcag attaaattag 420
tggacagtag tcaaatattg tgag 444

<210> 4702
<211> 413
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-060-Q1-E1-C11
<400> 4702

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cagggtcagc aagggcgccc ccgagcagat catcgagctg tgccggatga gcaaggatgc 180
cgagaagaag atccacgccc tcatcgacgg ctacgccgac cgccggcctcc gctccctggg 240
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<210> 4703
<211> 384
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-060-Q1-E1-C12
<400> 4703

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cattgtttcg atctcagccg tcggcctcgc cgctctccgc atcgtgatgt gaaggcagca 180
aagcaaatac gttctttggg ttaccata ttcgtcgccc gtccgtggaa acccgcaaga 240
agagaatagg ttctaattct gttcctagtt tttaaagggg acaaaacgtg ctgaggggag 300
ggggacactt ggtagtaggg agatgttgct caaacttgta aaaatagatt gcccgtagaa 360

gaaatgcatc cgaaatgatt cttt

384

<210> 4704

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-C2

<400> 4704

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tgaagccttg ccggcctttt gtacaagaaa accaagggaa gttcaacggc gggccgttga 180
aaaccgccc aagcagcttc tacggcgggc gggaccggtc cggcaccacg gcgggcgct 240
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tgctgttcgg tgacggcacg gcctgcggcg ggtgctacga agtgcggtgc gtggacagcc 360
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cc 422

<210> 4705

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-C3

<400> 4705

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acctgccggt ggtggacaac ggcgaggtgg tggccatgct ggacatcgcc aagtcctct 180
acgacgcat ctcccgatg gagagggcgt ccgagaaggg gaaggcggcg atcgccaacg 240
tcgcggtcgg cgacgacaag tactccatcg tcgaagctct caaggagcaa atgttcaggc 300
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cggtccttgc agcgaccaag aggatggtgg aagcgcatgc g 401

<210> 4706
 <211> 428
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-C4

<400> 4706

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agggatccgg gatggccacc ttcgtgcacc gcaagtacag cgacaaggag gacagcgaca  180
tattcaagtg ctacgacagc tgctccgacg acgtggagga ggccgtcgcc cacctcaacg  240
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cgctcgggcg cacctccacc tgcgaggacg cctgcaagga cctgcccagg accagcgaca  360
aggacgacgt cgtcaacttc agcctcgact tcgagaagct gcagcgcgtc acgctcgacc  420
tcatcacc                                     428
  
```

<210> 4707
 <211> 409
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-C5

<400> 4707

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ggcctccgtc ccgctggacg gcggcgcgac cacggtgcac tgctggcgct tcccgccgag  180
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catcgctccc gacctgctct tcttcggcgg ctcgctccac tcgtcggcgc ccggcgctctc  360
cgaggcccag caagcggagg cgggtggcga ggtcgtggcg gctgtggcg               409
  
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<210> 4708
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-C6

<400> 4708

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ccatcatcga gttctcggcg caggcggccg tggagaagct cgtcctcggc gccacgacga 180
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gcgcccgcgc gcgggtgtcg ccgctccggt cgcagatcca gtcgtcgcag attgccgcaa 360
cgctcaagcc cgagccgccc cagtcgcacc ggtggctctc gtcgtcgaga ggccacgagc 420
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<210> 4709

<211> 107

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-C7

<400> 4709

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<210> 4710

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-C8

<400> 4710

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tatttttcac gaaattgacg gagcatgtct ctctacgtgc cctgtacgca ctcatggcat 120
ggtcgtcatg gcttttccat ttcaatccta gcctgaacag tgagtgaagt aagcattgat 180
tgtctccacc agcgaatcaa tgtacgcgga acaggggagt tttatctcag caagtgcattg 240
gcgcagtctg cggcgtcaat gcaatagtac tgaggcttct gtttgcgcg gttcattgaa 300

tccttgtttg ccgaaatggc gactgcgccg gccccggctg cacttgccat ttgccaagca 360
gcaatcaggt tcacatgaat ggagcggacc cccatttgaa tccttctagg cacatcaatc 420
attcgctccc 430

<210> 4711
<211> 439
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-060-Q1-E1-C9
<400> 4711

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ccggcgcccc gccctcccc cacgtggcc gcaccgcaa tggggtgcg gccgtcggcc 120
gccaacgggg ccgggccccg gggcggggg tgggcgcggg cgcggatgcg gcggtacagc 180
gaggcgcca cctcggtct gccgccgcg ccgccgcgc cgcaggagg gccggagtcg 240
tcgtccggg gcaggaggcg agggcgcaag gtggcgccg agcccaagga gccggcgag 300
gaggggaccg ccgcgtgcc gccgatgcc ggctcgcca gcttcaggta ctactgccag 360
aagaagacgg cgccgtcga caggatcgt gccgacgcg acgccgccga cgccgatgac 420
tccgtcaggg tcagagcga 439

<210> 4712
<211> 431
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-060-Q1-E1-D10
<400> 4712

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tgctgtcgt gctggtcgcc gtgctagcgg tggccgccga tgtcgccaac gccggccacg 120
ccaagcccct aacgcctggc gggcgcgctg tacacgaaa ccacggcaag ttcacggccg 180
ggcgtggaa acccgccac gcaaccttct acggcgggcg tgacgggtcc ggcaccacgg 240
cgggcgctg cgggtacaag gacacgcga cgcaggggta cggcgtgcag acggtggccg 300
tgagcactgt gctgttcggt gacggcgcg cctgcggagg gtgctacgag gtgcggtgcg 360

tggacagccc tagcgggtgc aagcccgcgc cggcagcgct ggtggtgacg gtgaccgacc 420
tgtgcccgcc c 431

<210> 4713
<211> 422
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-060-Q1-E1-D11

<400> 4713

ggtcgaccca cgcgtccgca agaagtacgt gcaggactcc aagaacacga cggacaagac 60
tatggtgccg cccaccgtgt acccaccgcc gcaggccatg gcgtccgcat acccgccgca 120
acaatatgtg tcgccgtacg cggcgtaccc gcggcagcct tacgggtacc ctgctccgcc 180
accgtacggg tacaatgctg cttccccaca accggcgatg tacaactacg cagcacagcc 240
ggtagctgca cgggcgaggc atggcggagg tatggggatg gggctcggcc tagggctcct 300
angcggtgcg gtcgggggga tgatgctcgg agaggcgatc ggtgactatg agaccgacgc 360
cgcttatgat gccgggttca acgatgcatt ggcatTTTTAG attcaggttg tcgtgcagtc 420
at 422

<210> 4714
<211> 410
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-060-Q1-E1-D12

<400> 4714

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ggtgacggtg aacggcaaag cgtacagctt cgagaagctg cactggcact cgccctccga 120
ccacaccatc aacggccaga ggttcccgtt ggagctgcac ctggtccaca agagcgccga 180
cggcgcgctg gcggtcatcg ggatcctcta ccagctgggc gccccggact ccttctacta 240
ccagctgaag cggcagctgg gcgagatggc ccaggaccgg tgcgacttcg ccgaggagga 300
ggagtcgcgg gtggaggccg gcctcatcca cctgcgctcg ctgcagaagc gcaccggcag 360

ctactttccgc tacacgggct cctcaccgt gccgccatgc accgagaacg 410

<210> 4715
<211> 426
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-060-Q1-E1-D2

<400> 4715

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ggctgccact ccgccatcgc ggccaccaag ctgaagattc tgcgccgcgg aggccgggggt 120
gcccgtgccg tctctcccggt caccaaccac gacggcccgt gctgctcctc cgaccacggc 180
agcaaggaga agaagaagaa aaagaagggc gccaggaagg gcaggaaacg cgcctccatc 240
ctgggcgacg ccggcacctt cgaccoggac ttctcgcggc ggtaccggct cggcgcgagg 300
ctcgggcgcg gcgagttcgg cgtcacgagg cgggtgcgagg acgccgccac gggggaggcc 360
ctggcggtgca agacgatccg gcggaagcgg ctgctcctgc gcctcgccgg gncgcgcg 420
accgac 426

<210> 4716
<211> 458
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-D3

<400> 4716

gggtcgaccc acgcgtccgg acggctccac cgccatcacc gtctccaacg gccacttcac 60
gaggcacgac cacgttatgc tggtcggggc cagcgacgcc gcgtccaagg acagggagat 120
gcaggtcacc gtcgccttca accacttcgg caaggggctg gtgcagcgga tgccgcgctg 180
ccgtcacggc ttcttccacg tggtaacaa cgactacacg cactgggtca tgtacgcat 240
cggcggcagc cggaacccca ccatcatcag ccagggaac cgcttccgcg ccgtcgacga 300
cagcaggttc aaggaggtga ccaagcggga gtacacgcag tacagcgagt acaagaactg 360
ggtgtggaag tcgcaggacg acctgttcct caacggcgcc ttcttcaacc agtccggcgg 420

ccagaacgag cgcaagtacg acaggctcga cctcatcc

458

<210> 4717

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-C8

<400> 4717

ggtaacggtc tagaattccc gggccgaccc acgcgctcgg gaaatcagcg gccatggcct 60

cgattccggc gacgaccttc gccgtcatct tatccgtect cttctgtgcc gcggctggca 120

ccgccgtcga caacgacctc cccgactacg tcatccaggg ccgcgctctat tgcgacacct 180

gccgcgccgg gttcgtgacc aatgtcaccg agtacatcgc gggcgccaag gtgaggctgg 240

agtgcaagca cttcggcacc ggcaagctcg agcgctccat cgacgggggtg accgacggga 300

acggcacgta cacgatcgag ctcaaggaca gccacgagga ggacatctgc gaggtggtct 360

tgggtggagag cccgcgcaag gactgcgacc aggtgcagggc ggacagggac cgcgccggcg 420

tcctgcctca ca 432

<210> 4718

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-D2

<400> 4718

cacgcgtcca aacgaagaca gctaaccagc tagtaacaag aacaaaaaac accatcatcc 60

catccgcccc tgtcaacgcc accctagccc tgtgatatac aatggcggcc cagagcacga 120

ggatgggtggc gctggccctg gtggtcctcc tgggtggcggc gacggcgctg gtgcccacgg 180

ccaccgcgta cggctgctac gacgactgct acgagcgggtg cgccaacggc aagaaggacg 240

accccgctg caccaagatg tgcaaccagg cgtgcggcag caccgacaag ggcgccggcg 300

ccggcgcgcc ggcttgatcg acccgggctt catcggcgcg cgggctcagc tcgatatcat 360

catatacaat cgctgctccg tcgctcacgt cagcccatgc ataatctctc gacccggggc 420

attgaatc 428

<210> 4719
 <211> 423
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-003-Q1-E1-D3

<400> 4719

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cgaagggaac acccgcgctcc ttgcttatga gtatgcaact aagggatcat tgcgatgatat  120
cctccatggt aaaaagggtg tcaaaggagc ccagccaggg ccagtcctgt catggatgca  180
gcgagctang attgccgtat gtgctgctcg ggggtctcgag ttcctccacg agaaggccga  240
tcctcgagtg gtccaccgcg acatcaagtc aagcaacata ctgctctttg accatgatgt  300
ttcgaagaat cgggaactcg aaatcccana ccaggcccct gacatggctg cgcgcctcca  360
ctctactcgc gttcctggca ccttttggtt acatgcacca gaatatgcca tgactggaca  420
gct                                                                    423
  
```

<210> 4720
 <211> 325
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-D4

<400> 4720

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ggtcgacgca cgcgctccacc cagcggtccg cccacgcgtc cgcccacgcg tccgtttgac   60
tggtcgtgct gaaacggaga cgccggttat tgccggtttca attagaagga ttccaagggt  120
tccttcaaac atgcctttgt atgaaatacc caatgagttt cagaaaggaa ttagccaaat  180
ggctgctggt gtaaaggcta aacctaaaaa ctgaaccacc gcctgacaga actgaaccaa  240
ttagggaacc atttgggcaa gcaaatttga cggttacctg tgttaccaa ggctgaagaa  300
agtgcacaca atgtggttgt ggata                                                                    325
  
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<210> 4721
 <211> 394
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-D6

<400> 4721

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cgatgagcac ctcatgtgcg agatcgaggg ccaccacctg agctctgccg ccatagtcgg 120
ccacgacggc gccgttttggg ccagagcac cgcattccca cagttcaagc cagaggagat 180
gaccaacatc attaaggact tcgacgagcc tgggtttctg gcccgatcg gcctcttcct 240
tggccccacc aagtacatgg tcatccaagg cgagcccgcc gctgtcatcc gcgggaagaa 300
gggatctgga ggcataactg tgaagaagac cggacaggcg ctggtgatcg gcctctacga 360
cgagcccatg acccctggac agtgcaacat ggtg 394

<210> 4722

<211> 244

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-D7

<400> 4722

aggtaccggt ctagaattcc cgggccgacc cacgcgtccg aatcaccaaa ggaaaacaca 60
agagtactct tggaggaaag tttagcattc aatttaaaaa accttaccaa ctcatgcctt 120
atttgaatgc aataatgcat gttctgttgc catgctgttg cttggacaca tgcttggcat 180
ggctattttc tggttatgtc acaactcata tctcccatgt aaatttatgg ctatgatatg 240
catc 244

<210> 4723

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-D9

<400> 4723

attccaaggc cgaccacgc gtccacgtgc taacggtggc cgccgatgtc gccaacgccg 60
gccacgcaa gccctaacg cctggcgggc gcgtggtaca cgacaaccac ggcaagttca 120
cggccgggccc gtggaaaccc gccacgcaa cttctacgg cgggcgtgac gggtcgggca 180

ccacggcgagg cgcggtgcggg tacaaggaca cgcgcacgca ggggtacggc gtgcagacgg 240
 tggccgtgag cactgtgctg ttcggtgacg ggcgggcctg cggaggggtgc tacgaggtgc 300
 ggtgcgtgga cagccctagc ggggtgcaagc ccgacgcggc agcgctgggtg gtgacgggtga 360
 ccgacctgtg cccgcccagg gaccagtggg gcaagccacc gcgggagcac ttcgacctca 420
 gcatg 425

<210> 4724

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-E10

<400> 4724

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 cgacggcgagg caccttctgc tacatcgacc cggagtacaa gcagacggggg aagctgggag 120
 tcaagtcgga catctactcg ctccggcgtgc tctgtgtgca ggtgggtcacc gcgcggccac 180
 ccatgggggt cagcaccac gtcgagaagg ccatcgacgc gggcaccttc gcgcagatgc 240
 tcgacatcac cgtcaaggac tggcccgctg aggaggcgct cggctacgca aagctcgcg 300
 tcaagtgcac ggagatgcgg cggaggggacc gggccggact cgcaaccgtc gtactgccgg 360
 agct 364

<210> 4725

<211> 288

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-E4

<400> 4725

gggtcgacgc acgcgtccag ccgggacaaa accgccgctc ctctctctcc gcccctcccc 60
 gctctttctg tgaggcggga agcgaggcgg atgccgaggc gacggggctc gcgcaccgca 120
 cgcggtgtgc cgccgcccgg gggccaggcg aggtgggtgag gtgaggccga gcgcggtttt 180
 aaattgttca cccggccgcc cttctcgccg tagttttcag tgggtacaagc aaggaggagaa 240
 cgaacgtgag ggctgcctgc ctgcctgcgg acatgggctc cacctcaa 288

<210> 4726
 <211> 444
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-E6

<400> 4726

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ggtcagaat tcccggttcg acccacgcgt ccacgaggtg ctagcccgcc agatcgacgc   60
cggcaagggc gtggggccgcc ccgcgggcgt gctcatcaac ggcaagggcg gcaaggacct  120
ggaggccgcg cctgccttca ctttcgagggc cggcaagacg taccgcctcc gcgtctgcaa  180
caccggtatc aaggcgctcg tcaacttccg catccagggc cactacatga agctggtcga  240
gctggatggc tcccacaccc tgcagaacac gtacgactcg ctcgacgtcc acgtcggcca  300
ctgcctctcc gtgctcgteg acgccgacca gaagcccggc gactactaca tgggtggcctc  360
cacgcgggtc atccacgacg ccaagtccgc gtcgcgcgtc atccgctacg ccggctccag  420
cgccccgcgc gcgccggaac atga                                           444
  
```

<210> 4727
 <211> 125
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-E7

<400> 4727

```

ccacgcgtcc agtaatcttg agatgcatgc cctctcaaat cactgtactg gggttctcaa   60
aaaaatcatt gtaatgggag ttatatatat aactttatct caccatttat ttacaccaac  120
aagtc                                           125
  
```

<210> 4728
 <211> 387
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-F1

<400> 4728

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gactcacggg tcgacgcacg cgtctacact caggcgcagg gctgggcggt cgacggaggc   60
  
```

caatttctcca acttcctccc tccgtcgatc atccagcacc agcaggagaa tcccgtcgaa 120
 tccccctctc aaccaagggc gcgcgcgcgt gcgtatgcct cctccagatc caaagcaaca 180
 gacagcgagg gggcaccggg gtccgcccga tgtttgcgat ttatggagga tcatgctttc 240
 ttgcttacta cattagctcc tgacgcgccg cctcccccctc gcgttcattg atttcgggta 300
 taattactac cgagctacta tctccacatt attattggta aagaaagaaa gggcgcctcc 360
 tcaaatttga tgggcattcc gtttcct 387

<210> 4729

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-F2

<400> 4729

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 agccggcaaa aatttgtgat tttggtgctt ctactgtcat ttgttggtat gcttgccctt 120
 gccatcctca tatgggttgg tagaggagac aatcctatcg attcttctct actgaaaagg 180
 gtttatttgg atgtattttc agtagtagtt attgtacttg gtggtgctct ggcatgttac 240
 ggtgcagtgt tattctcgaa gatgagcaaa gttcgttctg aaactgtatc aactgagaag 300
 tggaagggtt ccagtttagc tgctgtctcg ctgatctgtt tctcgtcttc tgctatactt 360
 gcacttgtga ctaatgttcc agtgcttttg tattgggtact caacagatgt ggacatcatc 420
 a 421

<210> 4730

<211> 180

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-F3

<400> 4730

tcagaagaca acgcaaaagc aggattactg gatctggtgg aaataagggt tgaaggagat 60
 cacatatacc agttgcatgc ttgacaaact tcgtcaacta gcaagccctc tggcattgtc 120
 ctttgctctg gaagtaaaat ttactattcc aatagaatac atgacttaga cataaaagaa 180

<210> 4731
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-003-Q1-E1-F4

 <400> 4731

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attcacgggt cgaccacgc gtccaagctt gctcctcgat ccatcaattg caagaggagc   60
aagataccac caccgtagca ccacacgcag gtacgaagaa ggcgacgaac atggcgaggc  120
tggccttggg agcggcggtg gttctgtgcc tctgttagc gacagggccg cagggggcca  180
tcagcgccga ggggatggtg tcatttgaca atttgatcag ctgcaaggta ctgggcaact  240
gcgacaagaa cctgggcccc gaggcctccc gccagggaa acccgccaac gactacaccc  300
gcggtgcaa cccgatcacc ggctgtcgcg gctgatcata tctctctggt cgatgtgcgc  360
gcaatgtcaa tgtcgcacgc gcgtgcaggt accaggcctc agcgtgtggt gccgcgtgtg  420
tgtanatatt acacacatgc                                         440
  
```

<210> 4732
 <211> 416
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-003-Q1-E1-F5

 <400> 4732

```

ggtaacgggtc tagaattccc gggccgaccc acgcgtcaag gtgccacaac ctctcctgct   60
gtcgtgctg gtcgccgtgc tagcgggtggc cgccgatgtc gccaacgccg gccacgccaa  120
gccctaacg cctggcgggc gcgtggtaca cgacaaccac ggcaagttca cggccggggc  180
gtggaaaccc gccacgcaa cttctacgg cgggcgtgac gggtcggca ccacggcggg  240
cgcgtgcggg tacaaggaca cgcgcacgca ggggtacggc gtgcagacgg tggccgtgag  300
cactgtgctg ttcggtgacg gcgcggcctg cggaggggtgc tacgaagtgc ggtgcgtgga  360
cagccctagc gggtgcaagc ccgacgcggc agcgtggtg gtgaacgtga ccgacc      416
  
```

<210> 4733

<211> 360
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-003-Q1-E1-F6

 <400> 4733

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 gtgggcgaag agaccccagc cagtcgatcg ttcaagaaaa ataccagctt accaacaaca 120
 gcagcagcaa gcccacccgt tcgacgacat ggcccgcctc ggccgccggcg ccgtggtggc 180
 gctcctagtg gcggtcgcgg cggtggccgc gttcctcgcg gtgccggcct cggcgaagtc 240
 cggggagctg agcgcgatgg ggttgctggc ggccaagggc ggccagcggcg cgggcccgcg 300
 gaagtgctcg ggccggtgg gcgagtgcga cgtggacgag gcggaggagc tcgggctgag 360

<210> 4734
 <211> 396
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-003-Q1-E1-F7

 <400> 4734

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 gagtaccagc agacgggcat gtcggcgctc aagtccgacg tctactcctt cggcgatcatg 120
 ctgctgcaga tcatcacggc gaagccgcc atggggctgt cgcaccacgt cggacgcgcc 180
 ctggagcgcg gcgagctgca ggacatgctg gaccccgccg tgcccactg gccctggag 240
 gaggcgcagt gcctcgccga gatggcgctc cggtgctgcg agctgcgcc caaggaccgg 300
 ccggacctcg gcgcgctcgt gtcgccggag ctcaaccggc tgcgcgcgct cggcgaggac 360
 aacatgcagt actgcggcgc catcatcagg ggtggc 396

<210> 4735
 <211> 359
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-003-Q1-E1-F8

 <400> 4735

ccacgcgtcc gggcggtcac gatcacctgg gtgaaggcga ggcagatctt cgacagccgc 60
 ggcaacccca ccgtcgaggt ggacgtgggc ctcagcgacg gcagctacgc gaggggggccc 120
 gtacccagcg gcgcateccac tggaatatat gaggccttgg agttgagggga tggaggatct 180
 gattatcttg gcaaggggtgt tcttaaggct gtcagcaacg taaacaacat tattggacca 240
 gcgattgttg gaaaggaccc cactgagcag gttgagattg acaacttcat ggtccaacag 300
 cttgatggaa cctccaatga gtggggctgg tgcaaacaga agcttggagc aaatgccat 359

<210> 4736

<211> 408

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-003-Q1-E1-F9

<400> 4736

ccacgcgtcc acaagcattt gtatcgtaat gttgggcgtc atcagtgtg ccctggggac 60
 atactcctcc gtgaaaaaga ttgtagaaaa ctactaagct cttcgacaat aattgcctgc 120
 ctgcaccaga ctccacgtat ggaactcgaa atgttgaggc atctatatat acggcgacga 180
 ctactgtaca atcagagtac accttatgta cagtcaggat cagctagcac tatattctta 240
 gaacttggtc gagtgcagcg aggatgcatg ttcgttggcc ttttatgggtg ccaccatgg 300
 cgaagccata gcttgagcat gataatggcg ccatgcactg ttgtcttgta tcatatgcgc 360
 tgttctatct caagttcntt ttgaaggaag caagcttgat ttgtttgt 408

<210> 4737

<211> 430

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-003-Q1-E1-G10

<400> 4737

gacccacgcy tccacggacg cgtgggttca gaaggggtgc gtgcaagtac cccgctgggc 60
 agaagatcgt gttccacatc gagaagggtc gcaaccccaa ctacctggcc gtgctgggtga 120
 agtttgtggc ggacgatggc gacatcgtgc tgatggaaat ccaggacaag ttgtcggctg 180

agtgggaagcc catgaagctc tcttggggcg ccatctggag gatggacact gccaaaggcgc 240
 tcaagggccc cttctctatc cgcctcacca gcgagtcggy caagaaggte atcgctaaag 300
 acatcatcnc ggcgaaactgg agacncgatg cegtctacac ttccaacgte caattctact 360
 agactttgaa ttgccttcga ttcattccggc gcggcggggt atggacctgc agcagcaagc 420
 taattaaagg 430

<210> 4738
 <211> 331
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-003-Q1-E1-G11
 <400> 4738

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 tatcagtgat cgcattcgata aacacagttt gtctgaactc taaactttctc tgtgacacca 180
 ttctattctt caacaaacta aactcccttc actaatttta ggatgtactc gcatcaatct 240
 gttatatattt ctcagaaata ttaggctgtg tacacctcac gatagagatg cacaggggtg 300
 agtgtatatt atattaaaaa gttctttgtc t 331

<210> 4739
 <211> 280
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-003-Q1-E1-G2
 <400> 4739

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 tggaaaaccc aaatttccgy gtccaacaca aggaccaggy taacacattt caggatcccc 120
 acaattacag tggcttcaac aactctggag accaagcacg cttcaacaca agtaaagaat 180
 cacttccgat gcaattcttc cacaggcaat ccaattttta agtttgagca acatctccct 240
 actaccaagt gtccccctcc cctgagcaca gtttgtcccc 280

<210> 4740
 <211> 405
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-G5

<400> 4740

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 cgccgcctcg gagctggcca ccctgaagcg cccgttcggc aacgacgggt tcggcgatgg 180
 cagcaacaac ggcagcgcga ccggcgagaa gcccaggcg cggcggcggg aggcggagccc 240
 ggcgggcgcg atggccgcgg cgcggcacga gttcggcgag cacggcgcg tgaacatgtc 300
 catcgaggcg tcggcgacgt tcacggtgat ggagccggac acgatgcggc ggctgttcgc 360
 gggcgagctg ggccccgacc gcggagacat gtacatctac agccg 405

<210> 4741
 <211> 453
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-G6

<400> 4741

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 ggaactggtt tgactatcgt aaccatatct gtattgtctt tgagaggctt ggaccaagct 180
 tatatgattt tctgaggaaa aacaattacc gtcattccc aattgcccta gttcgggagt 240
 ttgccaaaca actgttgga tgtatagcat ttatgcatga attgcgcctc atacacactg 300
 atttaaagcc tgagaacatt ctccctgttt ctccggagta cattaaagt cctgattaca 360
 aagtctcatc ccaatcccca aaggaggggt cctattacaa gcagttgccc aagtctagt 420
 ctatcaaggt gattgatttc ggtagcacta ctt 453

<210> 4742
 <211> 213
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-G7

<400> 4742

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gcacagtcac gggtaccact agtccagtct cgttcaaatt catcactgct tgccactact 120
catgcgccta tccgtaatgt ccttggttagg cttggggcgac acttatagca ttttcacagg 180
ccacacgcct accgctcagt cgcagttggc cca 213

<210> 4743

<211> 429

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-003-Q1-E1-G8

<400> 4743

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gttccaggac acgctgtacg tgcacgcgcg gccggcagttc ttccgcaact gcgtgggtctc 180
cggcaccatc gacttcattc tcggcaactc ggccggcggtg ttccagaaact gcctcatcat 240
cacgcggcgcg cccatggaca accagcagaa ctccgtgacg gcgcacgggc gcaccgaccc 300
caacatgaag tccgggctcg tcatccagaa ctgccgcctg gtgcccgcacc agaagctggt 360
cccggaccgc ttcaagattc cctcgtacct gngcccgcgc tggaaggagt tctcgcgcct 420
cgatcatcat 429

<210> 4744

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-H1

<400> 4744

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gatcagcgtg gccttgctga gcgtggccct agtgggcctg ctctctgcc acctcgccac 120

caccgcctcc gccaccaga aagacatcca cgtcctcggc agcgtcgacg gtcaccagcga 180
 cggcagcagc cccgagtcgg aaggcccggt cgtctacgcg gacatgaagc tggctgatac 240
 ggaatccgat gcgcggggcg cggcgccggc gccggggccg tcgtccgggt gaactgagaa 300
 gcgtgcgtcc agccaagcaa ggtgggtcaaa accgagaact aattaagggc tcgattgtgt 360
 gtccgggtac tactgttctt gccataatta tatatagata cgcaaa 406

<210> 4745

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-H2

<400> 4745

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 tcaaggacgt gaccgtgacg gcgcccgggg acagcccca cacggatggc atccacatgg 180
 gcgactcatc cgggatcacg atcaccaaca ccgtcattgg cgtcgggtgac gactgcatct 240
 ccatcggccc cgggacctcc aagggtgaaca tcaccggcgt gacctgcggc cctggccacg 300
 gcatcagcat cggcagccta gggcggtaca aggacgagaa ggacgtcacg gacatcaacg 360
 tcaaggattg cactcttaag aagacgatgt tcggcggtccg catcaaggcg ta 412

<210> 4746

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-H3

<400> 4746

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 cggcacagaa cgtgaacccc agactgaggc gtcatcagat ggaaatagag aggtccctgc 120
 accagatctg gttcttctc tttgtgtttg tgctgctgtg cctgctcttg ttctgagacg 180
 gaggactgtt ctatatgcct ctttgtagat attgaagagg gggagagagg gataactaatg 240
 gatgatgcgt atagtagaca gggtaatggc ctgtatcgac aagcatgtgt ctaaagcatg 300

ctgatataga gttgtaatat gatgagacat gggaggtgaa atgtatattt cattcttctc 360
gtcataacgt cagcggtttc ctgatcaaaa aga 393

<210> 4747
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-H4

<400> 4747

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aacacogtct aagctctgcc ttagatggac actacgacga gaagaggaaa tccaatgtgg 180
aatacacaga ggacgagaag aaagccgtga tcgcggtctt gaaaaagaag gctttgagcg 240
cctcacagaa gtttaggcat tccatgaaga gggggaggaa gagcagcaag gtgatgttca 300
tctcgattct ggatgagcgt gaacctgagg aggtgcaggc tgtggatgcc ttccgccagc 360
ttcttgact tgaagagctg ctaccatcgc agcatgatga ctaccacatg atgctaag 418

<210> 4748
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-003-Q1-E1-H5

<400> 4748

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tgctgagag ggcttctgat ggccctcgac gccgtccttt cctcttagtg ccagcttta 180
ttgcagatcc agccctctga tcctcgtctt ctttcacctc tccaacatga aggtcaacac 240
caagatcaag ctggagccgg tcatggcgcc gtcgtcgtcc ctgccgcgga gcgccagcga 300
gtacccgac ccgccgtcac cgttcagctc caacacggcg caccaccccg tctccgtgcc 360
caccacacct aggttgctct tctcgtgctc gtcgttcggc cacatggtga ccccgcccaa 420
cgacac 426

<210> 4749
 <211> 466
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-A10

<400> 4749

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 gtatcctcct gtctcagctg cttcctagct ggggggtgctc tctaccgttt cgagtacgca 180
 gtcaaccccg cgctcttcct cgccaaagcg cgaggaggga cgtgcacgct cgctccctct 240
 gaccctgacg acacggtggc tcgccgcgcc agatacctgc tgagcaacgg tttcaggtgc 300
 tacaacctgt tcaagagcaa ctgcgaggac ttcgcgatat actgcaagac tggccttctt 360
 gtcgctgagc agggcggtgt cgggcagagc gggcaggcta tctccatcat cgggtggacct 420
 ctgcgcggcg tggctcgcac cccattccgc ttgggttaca cgaaca 466

<210> 4750
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-A11

<400> 4750

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 gcagctcatc ggcggcgacg tgctgtgcc tcgctctgc cgcggccacg ctggcgctgg 180
 cccacggggc gcaaggagga ggaccatcg catcgggcg gcacctggac aaggtcacgg 240
 ccgagacctt cctcgacatc gagatcgac gcaagcctgc aggccggatc gtgctgggac 300
 tgtttgggga caccgttcct aaaacagcag agaacttccg agcactttgc acaggggaga 360
 aaggaatggc caagtccggc aagcctctat ggtacaaagg gtcgacgttc cacaggatca 420
 tcccgggggt catg 434

<210> 4751

<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-A12

<400> 4751

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gatccgggtca ctggccgggg agggctcaga aacctttcat ccaatacata catctatctg 120
agccctttcc cgcggtgagg cccgaccgga gtccacacac acacggtgtc gatggcgggc 180
gtaataagga gccgccgccg cgtgtccgtt ttcttctacg tcgtcctcgc cgcagctgca 240
gctgcagccg cggcgcatgc atccaataac gtcacctccg acgaggagta ctgggcggag 300
cgcgccgagg tggctcggtc gcgcaacctc gccgcctacg tcagcgaccc cgtggccgcc 360
acgaaccgct tcaacgcgga cgtgctgagg gccacgacgc tgcgggcgct ggcgatgta 419

<210> 4752
<211> 466
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-004-Q1-E1-A2

<400> 4752

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gaactcggcg tcggggatgg ccgtgagcga cgagtgaag ctcaagttcc aggagctcaa 180
gtcgaagcga agcttccggt tcatcacgtt caagatcaac gagcagacgc agcaggtggt 240
ggtggacagg ctggggcagc cgggcgacac ctacgacgac ttcaccggct ccatgcccga 300
gagcgagtgc cgctacgccg tcttcgactt cgacttcacc accgacgaga actgccagaa 360
gagcaagatc ttgttcatct cctgggtccc ggacacctcg agggtcagga gcaagatgct 420
gtacgcgagc tccaaggacc ggttcaagag ggagctggag ggcac 466

<210> 4753
<211> 93
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-004-Q1-E1-A4

<400> 4753

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aaaaaggaag ggcggtcgct ctagaggatc cat 93

<210> 4754
<211> 474
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-A6

<400> 4754

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cgaggaggag gaggacggcg gcgggcaaaaa gaagccccac gtcaaccacg gcaagtttaa 180

ggcggagccg tggacggacg ggcacgcgac gtactacggc gggcgcgacg ggttaactga 240

caccacggac ggcggcgcggt gcggctacaa gggcgagctg gggaaagact acggcaccct 300

gacggcgggc gtggggccgt cgctgtacac caacggcacc ggggtgcggcg cgtgctatga 360

gctcaagggc cccaagggca ccgtggtggt gacggccacc aacgaggccc cgccgccggt 420

gagcgggcag aagggcgagc acttcgacct caccataccg gcgttctca agat 474

<210> 4755
<211> 444
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-004-Q1-E1-A7

<400> 4755

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accctctgct tgtgaagaca aggctcaggc actgggctca agtagtggct tgttcagtga 120

agcactcgag ctgatcctcg tcagtgtttt attcacgctc ttcttcata cataataccc 180

gtacaagtgg ttgcgatggc gatgaattag tcgtgtccga gtgaaactag atcaattgac 240

cttgttgctc gatctaattgt cgtcccaggt cacattgttg tggacagatt taattagcgt 300
 cgggttgga aattaaaaaa tgtatatgca aagtactgtt aaaggttggc atggtgtaaa 360
 aggtgtgagc tatctcccta aatcattatg tcacagattt gaaacagtct ttccgtatct 420
 gcganaaaaa acttgtctcg tttt 444

<210> 4756
 <211> 410
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-B11

<400> 4756

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 cgtggcgccc cttctctctc tctccctcct cgtctccgcc gcggccagtgc cgcggaaccgt 180
 gggcgacacc gtgcaggacg cgtgcagcaa gaccagttc cccaagatct gcgtggacag 240
 cctcgccgcc aagccggaga gccagaaggc gacgccgcgc aagctggcgg agctgttcgt 300
 gaacatcgcg gccgagaagg gatccgggat ggccaccttc gtgcaccgca agtacagcga 360
 caaggaggac agcgacatat tcaagtgcta cgacagctgc tccgacgacg 410

<210> 4757
 <211> 412
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-B12

<400> 4757

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 tgggtcggtc ctcccaaagt cgtcccaggc aagaggatca cggccaccta tggcaaggac 180
 tggttggacg ctaaagcgac atggtatggc aagccgacgg gtgccggtcc cgacgacaac 240
 ggtggcggct gcgggtacaa ggacgtgaac aagccccct tcaagagcat gggcgcatgc 300
 ggcaacatcg ccatcttcaa ggatggtctg ggttgtgggt cctgcttcga gatcaagtgc 360

gataagcctg tggagtgctc cggcaagccc gtggtggtgc acatcacgga ca 412

<210> 4758

<211> 473

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-004-Q1-E1-B2

<400> 4758

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ggacttcggc gacaacctcg acctcaccgc cagccncgct cgggagccca tgtcaccggc 180

caccggcgcg caacgggata ttgaggtcga gatgcggcgc ctccggctgg aactcaagca 240

gaccatggac atgtacaacg cggcgtgcaa ggaggccatc aacgccaagc agcgggccaa 300

ggagatgcag ctgatgaaac tggaggagga gcgtcggctg gaggaggcca ggcacgccga 360

ggagactgct ctggcactgg ccgagatgga gaaggccaag tgccgcgcgg ccatggaggc 420

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<210> 4759

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-B9

<400> 4759

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aggggaggat gaggaggaga agaagctgaa tgcaacatac ataatcagtg ttgctaggaa 120

gctaggttgc actgtcttct tgctacctga agacataatg gaggtgaacc caaagatgat 180

cctcaccctg acagcaagca tcatgtactg gagcctgcag aatcaagggc catacaagag 240

ttcaggacca caggatgctc ttctagagga agaggaaggc gaggaggagg aagaagaaga 300

agaagaggag gaagaggagg aggaggattt cgaaggaggt gtcgaagatg gtgtctctga 360

aacgaccact tgataagaat tgtcacgctt gactagccat tgccggtaaa gtcactggctc 420

tattaagggc atata

435

<210> 4760

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-C10

<400> 4760

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ccgacttcgt gtggcggatc atcctgatgc tgggcgcgat gcccgcggcg ctcacctact 180

actggcgcac caagatgccc gagacggcgc ggtacacggc gctgggtgcc aagaacgcca 240

agcaggccgc ggctgacatg tccaagggtgc tgcagggtga gatctcagcc ggccgccgccg 300

aggaggacgc cgtgggtgcg actgcgactg cgcttgcgcc ggcgtcggcg tcggcgtcct 360

ttgggctctt ctccggggag ttctccgcc gccacgggct gcacctcctg ggcacgtcct 420

cgacgtgg 428

<210> 4761

<211> 450

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-C11

<400> 4761

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gcatcaccgc gaaatctaata aactcgttgc tcttcgtctt cgctccgcga tcgatccagg 120

agggggaagc agaaggagg atggcggaga acccgagct gtttgggaat gggatgccgg 180

tgccgttcta cagtgaatg ttcttctcgc cccgggatgg cgtcgagttc cacgtcgaca 240

agatcccatc agctcctggt ggtcatgtga aaacaaaagg cacaatttac ctgtctaata 300

taaggatggt gtttgttgc aacaagcatg ttggcaactt ctttgccttt gatatgccac 360

tgttgtttgt gcacggtcag aagttcaatc agccaatatt tcaactgcaac aacatctctg 420

gattcgttga gccagttggt ccagacaaac 450

<210> 4762
 <211> 448
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-C12

<400> 4762

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cgcgggcctc ccgagatacg aggtcgcggc ggggcgcgcg gacggcatgc gctcgaacat   180
ggacgacctc ccgggcaact tccccgtgcc gggccaccac gtgccgcgcc tcaccgagct   240
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cggcggcgcg cactgcttca tgttctccaa ccgcatctac aacttctccc aggacgccga   360
cgtcgacccc acgctggacc cggagtagcg caagtggctg cgccagatgt gcccgccgcg   420
gcagcccggc gacgaacctg agcaagcg                                     448
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<210> 4763
 <211> 473
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-C4

<400> 4763

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cacgcgcagc caggggtaga aacgaccgcg tcaccgtatt tgacccttca ccgtgcaca   180
ccagtgtcgg cgagtccttc ctgtgcctcg tcttccccct tccccctccg agtccagccc   240
ggcgccaccc actcagccgc ggatccgagg cgcagatccg atccggcgat ggcgtccacg   300
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gcgcagcgga accgcagtg ggcgagcgtc tctatgggg tggtcatgtg cctcgagtgc   420
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<210> 4764

<211> 422
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-004-Q1-E1-C5

<400> 4764

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tcgccgccgc cgccgccgag gagaagaagg tgcaggacaa cttctgctcg acgctgtgcg 120
agggcaggaa ggggatggac ctggtggtgt gcaaggagtc ctgcgacctc tcacagcgct 180
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tcaccgcgcc gcagatgaag gtgtgccaaag aggcgtgcga caaggactac gtggtcaagg 300
cngctgaggt caccaaggcc tgcaacacca cctgcgcccc agagaagcag cctctgctca 360
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gt 422

<210> 4765
<211> 473
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-C6

<400> 4765

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catttctcct agaaggtaga aggtcgagag gagaagaagg cgagacgtgc agtccgtcgg 120
gcaccgatcg agaacagggg agcaagaggc tgctagagat cgagctcacc aaccaaccaa 180
gtcgtacgtc gtcagcatca cgaccgatg gcgcgtgccg cgtccagcta tgtatccagg 240
agggggctct ccgcagcgat gacggtggcg gaggagtccg tgaagaagggt ggaggacaag 300
gcggtgaagc tgggaactgt ggccaaggac atcgccagcg ccatggccac cagcagggag 360
gagaagacgg cgttctggga acctgacccc gagaccgat actaccgtcc ggtcaccggc 420
acgaaggagg tggacgccgc cgacctgcgc gccgagatgc tcaagcggag gat 473

<210> 4766
<211> 472

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-004-Q1-E1-C7
 <400> 4766
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 acaccaagat caagctggag ccggtcatgg cgccgtcgtc gtccctgccg cggagcgcca 120
 gcgagctacc cgaccgccc tcaccgttca gttccaacac ggcgaccac cccgtctccg 180
 tgcccaccac acctaggttg tccttatcgt gtcgctcggt cggccacatg gtgaccccg 240
 ccaccgacac accgccgatc acgcccacca agaagcagga cgacaagccg aagccgacgc 300
 cggaggccgc caccgcggcg aactacgcgt cgttggtggtc gcccaagcgc ctcatgcagc 360
 gcgctgcccg cgctttccgc cgcagcaggt cgcgcgcccg cgtcaggacg gtcaaggacc 420
 tcgccgagga acgggcctca gtgctcgccg ccagcaacaa ggtctccgat ga 472

<210> 4767
 <211> 425
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-009-Q1-E1-B8
 <400> 4767
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 aaccgcctct acgccagggg gctgcaggac gtgtgcaggg actacctcaa ggacccccacc 120
 atcgccgcgt tcaacgacat catgacgccc ggcaagttcg acaacatgta cttcgtcaac 180
 ctcgagcgcg gcctcggcct gtcagcacc gacgaggagc tgtggacgga cccacgcacc 240
 aagcccctgg tgcagctcta tgcattcaac gccaaaacct tcttcgacga cttcggccgc 300
 gccatggaga agctcagctt gttcggcgtc aagaccggcg ccgacggcga ggtcaggcgg 360
 cgctgcgacg cctacaacag cggccccgcc gtcgcccga ccatacccaa gatgtgacga 420
 cgctg 425

<210> 4768
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-B9

<400> 4768

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gagagaagct cagagaccgg ttcttggcct tccaaaaaag aagtagacat aagatagatc 120
tctcgcctc tctcgcctc acctcctcca acaagtaaca ttgaccgcaa acggatcatc 180
gtccggtgcg gtcaatgtaa ttaactaagc ttctcaatca tacatagctt ggcaaagtcc 240
tgagggctag ctagacaagg tccgttgagc tagccccctt gggaagaagg gagaggaatg 300
gcgctggtgg cccgttgagc gaggaagagg ctattgagaa cccgttaaca agaattgcc 360
gcagcatctg gacaatcttg ttaacagagt tccaaagggt caattccaag cggataca 418

<210> 4769

<211> 435

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-009-Q1-E1-C1

<400> 4769

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tgtgtctgtc tgtccgaccg tcagtcgctc taacaatcga tttccatgac gacgtccccg 120
cgcgtgtggc tgctcgccat ggcactggcg ctgcctgctg tgctgctcgt gaggtccgcc 180
gacgtgctg ccgaggcgtc cccgactcca ggcggctcca cctacgggtg caaccgggcc 240
acggacaagt cgtgcaagcc cgagggcgctg ggggtggtgc tgccggggcg cggcatcgac 300
ctcgacggcg acggtgacga ggacgagctg ccgcagttcn aacccccact catgacctc 360
ggccatggcc actgatgagt gtaaatgggt tgttggttgg tcgtcctcgt ctgagccgat 420
ctactggacg acacg 435

<210> 4770

<211> 98

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-C11

<400> 4770

gtccagttct aaatcgcgag cggccccctt tttttttttt tttgatttta aaaggaaata 60
tcatatatat tccatcacia gattacagaa cgacttga 98

<210> 4771

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-C12

<400> 4771

cccacgcgtc cagcacagag ctagctagcc agccagccag cagccagctt gctcgccgcg 60
cccgtccttc ttctcgcct ccgttccatt ccgtcccgcc ctccaccgcc gccgccgcat 120
tcagggatgg agatgaagaa gatcgctgc gccgtcctcg tcgccgcctc gccggccacc 180
gtggcgctcg ccgcggaggc tccggctccg gccccacca gccgctcctc gccgctcgcg 240
cccgccgtcg gccgccccct cggggccgcc gtgcctcctt tcttcgccta ctacattcag 300
tgagccggcc ggggcgcccg gaggccgagg aagagacgaa ggggagagag agtgacatgg 360
ctgcgcgcat tccgatgcgt gggcatgttt tttgattoga cacacctttt gtctcttttt 420
tctttgttcc ctctttctcc 440

<210> 4772

<211> 452

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-C2

<400> 4772

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aaccatgtgg tcgtcgatgc gggcacaggt tgcgatgggt gtggcgttgg tgttcttgggt 120
gagaggcgca tgggtgcggtc ctcccaaagt cccccaggc aagaacatca cggccaccta 180
tggcaaggac tggctggacg ctaaagcgac atggtatggc aagccgacgg gtgccggtcc 240
cgacgataac ggtggcggtc gcgggtacaa tgacgtgaac aagccccctt tcaatagcat 300
gggcgcatgc ggcaacatcc ccattctcaa ggatgggtctg ggttgtgggt cctgcttcga 360

gatcaagtgc gataagcctg tggagtgtc cggaagccc gtggtggtgc acatcacgga 420
catgaactat gagcctatcg cggcgttaca ct 452

<210> 4773
<211> 399
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-C3

<400> 4773

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ctctcctcgc gccaacgacg acgacgacga cttcgacgcc cacatcgggc tcccgcccat 120
cgcgcagaac gagcccatcc tcttcctcat ctgggagcag atcgcagtgc tctacaccgg 180
caacctcgaa gcccgcgccg acgccgccgc cagcctcgtc tcgctggcgc gcgacaatga 240
caggtactct aagctcatca tagaggaaga tggcgtgccg ccgctgctca agctcgtcaa 300
ggaggcgcgc ctcgaggggc aggagaactg cgcgctcgcc atcggcctcc taggccgcga 360
tccggagtgc gtcgagcaga tggccaagc cggggtgtg 399

<210> 4774
<211> 442
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-009-Q1-E1-C4

<400> 4774

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cctattggaa cgacttgta gttgttattc cattgcatcc aaagtccaca tgttattttg 180
ttaagctcca taatgctgtg gcacgtgtt gcgaaaacat taattgggag aacattagta 240
catgaatact tgatcttcat agttcagttt tcgtgcatgt gcacttgta gttgcgaaaa 300
tgaactaatt tcccttgng aaatangtat cccttgaaa aatggttttg ccanactacc 360
ccttanagga actaatcct ggcatatggg gctcagtggg cagtgcacga ggactcgaag 420
gaagcatagc atcatcggtt tt 442

<210> 4775
 <211> 380
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-C5

<400> 4775

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cgctgatgcg tccggcggaa cgtctaccgc ctcgtcgaca aagttcttaa catcttcgac 120
gtcgtcaacc agccggagca agcgcacaag cacgggtact atccgcgtgc gcgctggccg 180
gcctggcagt tgtaatagcc gggatggtgt tgtatcgatc tcctttctgc acttgaatat 240
atatgtgaat aacgcttgag ataaatctgt attgctaggt gtagtgtaac ttgatcaggt 300
tactgctaac acggaatttc aggtttagga caggaggccg aagaaagaga caaaagggag 360
agacgctcta aaggatgcac 380
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<210> 4776
 <211> 459
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-C6

<400> 4776

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ccccgtccca atggcccaga ctctgtccgc cgcctcggag ctggccaccc tgaagcgccc 120
gttcggcaac gacgggttcg gcgatggcag caacaacggc agcgcgaccg gcgagaagcc 180
caaggcgcg gggcgggagg cggaccggc ggcggcgatg gccgcggcgc ggcacgagtt 240
cggcgagcac ggcggcgtga acatgtccat cgaggcgctc gcgacgttca cggatgatga 300
gccggacacg atgcggcggc tggtcgcggg cgagctgggc cccgaccgcg gcgacatgta 360
catctacagc cggcacttca acccgacggt gctggcgctg gggcggcaga tggcggcgct 420
ggagggcacg gaggcgggct actgcacggc gtccgggat 459
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<210> 4777
 <211> 400

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-009-Q1-E1-C7

 <400> 4777

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 actgcaagag gtctgcacc cctcctcctt cttgaagcga agccccttga aatgaatgaa 120
 ccatgcatgc atgcatgtat gcatgcgccg gggtgacgtg gcgttcagct caggcgctga 180
 gcgagtctat acgtacgtcg tcaacggctg gccacgcatg cgataaccat ctgatatgga 240
 cggaactata tattgtattc ctattaatct ggcattttct aagctaattg tttttttcca 300
 aatataccgt cgatggaact ccaaagttaa tgtcacgcaa atgtgtgttt ttcacgcatt 360
 gaatgggtaa taataaaaac gcatgctggc agttactact 400

<210> 4778
 <211> 444
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-009-Q1-E1-C9

 <400> 4778

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 gcctcgagca cggcatcgag cccgatggca ccatgccag tgatacctcg gttggcgctg 180
 cacatgatgc cttcaacacg ttcttcagcg agaccggttc tggcaagcat gtgccgaggg 240
 ccatcttcgt cgaccttgaa cccactgtca ttgatgaggt tcgcactggc tcgtaccgcc 300
 aactcttcca cccagagcag ctcatctcgg gcaaggaaga cgcagctaac aactttgccc 360
 gtggccacta cactgttggg aaggagattg tcgatctatg cctggaccgt gtgcgcaagc 420
 ttgcagacaa ctgcactggg ctgc 444

<210> 4779
 <211> 215
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations

<223> Clone ID: LIB148-009-Q1-E1-D1

<400> 4779

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tatgggatat tctacccgtg tatgcatgga ttgacaaaaa tgttggttac ggccaaggaa 120
tgattgattt aggctcacia atgatatttc tacaaaagga tgaaccaa at gccttttggg 180
gctttgaaaa attgatcctt aaattgcaag gaaat 215

<210> 4780

<211> 424

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-009-Q1-E1-D10

<400> 4780

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aaaatgaccc gtgccagcag cagtagcagc agccggcggtg tgacgctggt actgctcggt 120
ctccgcctgc tgcttctggt tgggtgttgcg caggcggtag tggagttggt gcctgctgat 180
gataatatcg ccgccgccgc tgctggcacg gcggtggacg atggcgagcc gcctcagcag 240
tgccgcgaccc cggtagcgt ggaggaggcg tgccgcggcg cgtccgagac gcacgccggc 300
gtggcctacg accactgcat ggcgtcgctg ggcgccgacc cgcgcagcaa ggaggccggc 360
aacaagaaca tgcacgggct ggcggtgctg gccaccagga tggccatcgn acacgccgcc 420
agca 424

<210> 4781

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-D11

<400> 4781

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gcaaccagcg atcgccccat ggccgccatg gctcggttccg tctccctcgt cgtggcgccc 120
cttctctcc tctccctcct cgtctccgcc gcggccagt cgcggaccgt gggcgacacc 180

gtgcaggacg cgtgcagcaa gacccagttc cccaagatct gcgtggacag cctcgccgcc 240
aagccggaga gccagaaggc gacgccgcgc aagctggcgg agctgttcgt gaacatcgcg 300
gccgagaagg gatccgggat ggccaccttc gtgcaccgca agtacagcga caaggaggac 360
agcgacatat tcaagtgcta cgacagctgc tccgacgacg tggaggaggc cgtcgcccac 420
ctcaacggcc tcgtccggga gc 442

<210> 4782

<211> 449

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-009-Q1-E1-D12

<400> 4782

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gatccctcgc taataacatc atggctcgtgg gtgtcgtcct tgcagcgctc gtcgccggcg 120
ggtcattgcgg gccccgaag gtgccgcccgt gtccaacat caccaccaac tacaacggca 180
agtggctcac cgccagggcc acctgggtacg gtcagcccaa cgggtgccggc gctcctgaca 240
acggcggtgc gtgcgggatc aagaacgtga acctgccacc ctacagcggc atgacggcgt 300
gctggcaacgt ccccatcttc aaggacggca agggctgcgg ctcatgctac gaggtgagat 360
gcaaggaaaa acctgagtgc tcgggcaatc cagtcacggt gtacatcact gacatgaact 420
acgagcctat cgctccctac cacttcgac 449

<210> 4783

<211> 127

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-D3

<400> 4783

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tacaagctta catgtgcatt catgctaagg cagtgtcttt ctatagtgtg tgtaacattc 120
aattaat 127

<210> 4784
 <211> 469
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-D4

<400> 4784

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 atggtcgtgg gcgccgtcct tgcggcgctc gtcgccggcg ggctcgtcgg gccccgaag 120
 gtgccacccg gcccacacat caccagcaac tacaacggca agtggctcac cgctagggcc 180
 acctggtacg gtcagcccaa cgggtgccggc actcctgaca acggcggtgc gtgcgggata 240
 aagaacgtca acctgccacc ctacagcggc atgacggcgt gcggcaacgt ccccatcttc 300
 aaggacggca agggctgcgg ctcatgctac gacgtgagat gcaacgaaaa acctgagtgc 360
 tcgggcaatc cagtcacggt gtacatcact tacatgaact acgagcccat cactccctat 420
 cacgtcgact tgaacggcaa cgccttctgc tccctggcaa agcccgggc 469

<210> 4785
 <211> 308
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-D5

<400> 4785

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 agggcatcga tgctaaagcg tccgggcctg gtgggtcctt cgacatcaac aagttgggcg 180
 cctccggcaa tggcaagaca gacagcacga aggctgtgca ggaggcatgg gcatcggcgt 240
 gcggcggcac tgggaagcag acaatcctca taccgaaggc cgacttcttc gtcggacaac 300
 tcaacttc 308

<210> 4786
 <211> 440
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-009-Q1-E1-D6

<400> 4786

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accccgagaga ggtccagttc cggcgaggct gtgacgttac accgggtgtg taccacatcg 120
cgaaatggaa tggcacaaag gtttcogtaa aaatacttga cagagacggg tgctccgac 180
aagaagccgc aaactctttc aggcataaat tgactgtgct ggagaaggct cgacacccta 240
acgtcggttc gttcgtcggg gccgtcactc agagcatacc tatgatgact gtgtctgaac 300
tccatgaaga gaaagactta tcagtctgta tccagaaaaa aggaaagtta aagcctcaga 360
agggtgctaag atacggcctt gatattgccg agggcatgac ctacctccac cagtgcgaang 420
ccggacccat catccactgc 440

<210> 4787
<211> 287
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-D7

<400> 4787

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tcgggtctgtc gtaaggcaat tgatcaagct agatatatat ataggagatt cgtcgaacga 180
gctactagcg aaatgggttc cgccgtcctc ttttactgca tctggatcgc cgtcatcgctc 240
acattgtcct cgtccatggt cgctgtcggg gacggagacc cggggga 287

<210> 4788
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-D8

<400> 4788

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caaatttggg gcgcaatatg gctgaagaga agagccgtcc ggggctgaac gagcggatca 120

tgtcgtccct ctcaaagcgg tcggtcgctg cgcattcctg gcatgacctt gagataggac 180
 ctggagcccc tgctgttttc aattgtgttg ttgagatcac aaagggcagt aaagtgaaat 240
 atgagctaga caagaagacc ggaatgatca aggttgacag ggtgctatac tcatcagtgg 300
 tctaccacaca caactacggt ttcattccac gaacattgtg tgaagacgga gatccaatgg 360
 atgtgctggg gttgatgcag gaaccggtga tacctggctg ttttcttcgg gcaagggcca 420
 tcggccttat gcccatgatt ga 442

<210> 4789

<211> 461

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-D9

<400> 4789

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 aaatctattc atttgacacg tctccatctc attgagcatt taattatttt tgggcaggaa 120
 agaacacata ccagagatga ggttggttgg ttaatttgat tctaagtcct aatgaagaag 180
 attgtgagct cgggcccggc ggtgccgccc tctgggttgt gcatgtagta cgtctcggag 240
 tccttggaac cgacgaggcg gtcgaaatgc gcgcgcattg aggtgagctc gccgtcggac 300
 ggggtgggaca tatcggacgg cagcacgccg gcgcccatgg acgtggagtg gagcatccgc 360
 atcacgcagt cgtcccgtc cgctgcctcc cgcgcgcacg cgtgcccgac actctcgccg 420
 ttcacctcgg ccgtccagac cggctcgtcg agcagcctcc t 461

<210> 4790

<211> 302

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-E1

<400> 4790

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 ccaccaccgt agcaccacac gcaggtacga agaaggcgac gaacatggca aggctggcct 120
 tgggtaccggc ggtgggttctg tgcctcctgt taccaacagg gccgcagggg gccatcagcg 180

ccgaggggat ggtgtcattt gacaatttga tcagctgcaa ggtactgggc aactgcaaca 240
 agaacctggg ccccgaggcc tcccgcccag ggaaaccgc caacgactac acccgcggtt 300
 gc 302

<210> 4791
 <211> 432
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-009-Q1-E1-E10
 <400> 4791

gaccacgcg tccaggagaa ccagcagcct ccaataagag ccagccagag aaactaataa 60
 aactctcgcc gccgccatcc gagcgaacaa gccaacgcac cccgtcccca aggcaatccg 120
 ccgccgacgt accaccacca ccgcaggagc gagatggaga tgaagaggat cctcttcgcc 180
 gtctctgtcg tcatcgccgc ctcgccacc gcagtgtctg cctccaccga ggccgcccgc 240
 gggggcgccc caactgcctc cgagtcgtcc gccgaggctc ccgtggcgcc tggcgctggc 300
 gctgccgctg gcgccgcgc cgcgggggccc tccgccagca gcggcgcgcc cgccctcgcc 360
 gccgcgccc ccgcgtcct cttctccctc ctgcctact acctccacta agcgtgtgcg 420
 tggctacgta cg 432

<210> 4792
 <211> 388
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-009-Q1-E1-E12
 <400> 4792

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 tcgtctcgg cgcgctcctg ttcgtcagta tattcagggt cttacatagg ctcacacgcc 180
 ggttcatcac tccgttcgtt cgttcgtaag ccgtctacat acacgattct tttgtccac 240
 acacacacat acacatacac gtctgcaaag tacatgcgac attgcagctg cttcgcatgt 300
 atgtatgatg aatgaaatga aaactcaaac acattctcta attcttttgt tccgtccaaa 360

acaaaatcat tcggaatcac catcaacc

388

<210> 4793

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-E2

<400> 4793

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gatacgtgaa atccaaccgc cgggaggtgg agaacgccac ctggatgctg acggtgttcc 120
actgcttcgg ccactacttc tgcctgcact tcgaggcggt ccagctcggg atggcgcccc 180
tgtacatggc ctctctccgc ttcattggggg acgagaacga ggccaagaac tacagctaca 240
gcctcgaggt cggcgccaac gggaggaaga tgggtgtggga gggcacccca aggagcgctc 300
gcgacagcca ccgcaagggt agggacagcc acgacggcct catcatccag aggaacatgg 360
cgctcttctt ctccggcggg gaccggaagg agctcaagct 400

<210> 4794

<211> 202

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-E3

<400> 4794

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ccatggtcat tgcgattcgc tagcgtctga ttgagggctg tggcctagtg atcttcgcaa 120
aggcacgcgg atggttatca tgccctcacc atgcgggttct ggggccccaa cggtaatgaa 180
ttgtcaggac gcacccctca at 202

<210> 4795

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-E4

<400> 4795

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cctccgacca ccgtacgtcc tccaccgcgt cgccgccggc cggcctctgc ccagcccggg 120
ctgcctgcga gggcttctga tggccctcga cgccgtcctt tctctctagt gccagcttt 180
attgcagatc cagccctctg atcctcgtct tctttcacct ctccaacatg aaggtcaaca 240
ccaagatcaa gctggagccg gtcattggcg cgctcgtcgc cctgccgcgg agcgccagcg 300
agctacccga cccgccgtca ccgttcagcc ccaacacggc gcaccacccc gtctccgtgc 360
ccaccacacc taggttgctc ttatcgtgct cgctgttcgg ccacatggtg accccgcca 420
ccgacacacc gccgatcag cccaccaag 449

<210> 4796
<211> 448
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-009-Q1-E1-E6
<400> 4796

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accgcgacgc aagaggcagc gatccgtatg tcgtctctacg gcttggcaag aagaaactga 120
agacaagcgt gaagaagaga tccgtgaacc ccatatggca agaggagcta actctgaccg 180
tcacagatcc cagccaacca ctgaagctgg tgagtgcgca gcaagcagaa cgatcctgtt 240
tgtgattcat tattctagac tgtttgctac aggagggtgtt cgacaaggac accttcagca 300
gagacgaccc catgggagac gcggagggtgg acgtggcgcc actgatggag gcggtgagca 360
tgaacccgcg ggaggagagt ctgaggaacg gcgccatcat cagggtccgag cggccgagcg 420
ccaggaactg cctcgccgac gagagcca 448

<210> 4797
<211> 442
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-009-Q1-E1-E7
<400> 4797

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 cctccaacat catgcagtgc aggtcctgct ggtgaggata tgttccactg gcaggcaacc 180
 atcatgggtc ctctgatag tccatatgct ggaggtgttt tcttggtgaa cattcatttc 240
 ccgccagact accccttcaa gcctccaaag gtatctttta agacgaaggc cttccatcca 300
 aacatcaata gtaatggaag cataagtcct taaaatccta aagancaatt gaacccttgc 360
 ttgacaatct ctaagggtttt gctttctatc tgctccctgc ttactgatcc caaccagacg 420
 accctcttgt cctgagatt gc 442

<210> 4798
 <211> 432
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-009-Q1-E1-E9
 <400> 4798

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 cctgcaatcc ctaacaggaa tagcaaggag atcactgcct tggctcccag cagcatgaag 120
 atcaagggtg tcgtcctcc agagaggaag tacagtgtct ggatcggagg atccatcctg 180
 gcatccctca gcaccttcca gcagatgtgg atcgccaagg ccgagtacga cgagtccggc 240
 ccatccatcg tccacaggaa atgcttctaa ttctttgggc ccgagaaatg caagccgtgg 300
 gggagccgtt accgccgcca gcctctcctg ccccggtttt cgttgccgtt tcttcattag 360
 cgcgaacaaa gttttgtgcc ggtctatcgg ccgcccgttt cctcccctat tcatcaagac 420
 cgcaataact gt 432

<210> 4799
 <211> 220
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-009-Q1-E1-F1
 <400> 4799

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tccctttgcc tgatgttttt gtgggggaca aagggaggcc agaagcggta gcaccgccgc 120
 cgcgctcatgg ttccgccggag acatacacia agacaggaag caaaacatgc aaaattgccca 180
 ccgcttctca ctcaatttta tgctcgaatg tgaatctcat 220

<210> 4800
 <211> 442
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-009-Q1-E1-F10

 <400> 4800

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 gcgctctaca tggaaggcga gaccggcgcc caaatcaacg gaatcactgc tccgcgctct 120
 ccagacgcgg acgggattgc ggctcgcgc cgcgctctcc gggttcgccc agatcgacgg 180
 cgtccgcgcc gcgcttgccc agattgacga aatttgagc ctccagacgc gagtctggcg 240
 ctcgctattc gtggaaggcg aggagagacg acgcacggcg tctcgatccg cgctctacat 300
 ggaaggtgag gcagattggg ggagtggtc gtggccgctg cctcggcgcc gtcctccgtg 360
 ccgtccggcg aggtgtcgtc caagcacggc ggcgacgact acgtgattgt gggcgggccc 420
 aacggcaacg ccgtcgcgcg cc 442

<210> 4801
 <211> 456
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-009-Q1-E1-F2

 <400> 4801

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 aacgagccgg cgggcaagtg gatggacctc atctaccagg ccctgaacag gccgcgcgcc 120
 caccaggacg gccagtcctc cggcgacgag ctctcgccgc cgccgtccac ctctctctcc 180
 cactacccca gccggccgca aggtgccgcc cgcgaccca gcaacgccgc cgccatcccc 240
 aagacctcca gcggcggcat gctctgcgcg cagaagccgc cgccgccgct caagatggtc 300
 agcaagtgct accgcgtcga caacgcgctg gtgaagacgt gcacctgcat gtccgacccg 360

tccaacatgc agctccgggc gcgtgagatg cgcgagttcc tctgccgcgt ccaggccgcc 420
gccgcctcgc cgggccgcgg cgccgacgac gacgcg 456

<210> 4802
<211> 361
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-009-Q1-E1-F3

<400> 4802

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tcgagaagcc caggggaagtg tgccggagca tcattgagtt cttcaaggag ccggtcgctg 120
gagctgcaaa tgcggacgac aaggtgtagt agcttccacc aatggcggac gtggacaggt 180
cttcgctggg catcggcaga cggcgcaccc gcttgtggca cgcaaacaca aggcagatac 240
gtggcattgt acatctacat ccctctgcca ttgttctgat gtacttaaag ggtgtatgta 300
gagtcattgc agtagcgatt catanagcat gtaacgggga acagagggaa acatagtggc 360
t 361

<210> 4803
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-F4

<400> 4803

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cgctggcgct accgtaggtg ctggtgtctc gggaggcgct aaagttggtg gtggcgttgg 120
aggaaacgcg ggaggaagtg gcaaggcgta tacaggaacc ggtgccgatg cgggtgtttc 180
cgggtggagga tccggtggcg tcgatgctgg tgtctccgga ggcgccaaag ttgacggcaa 240
cattggagga aaagcgggag ggagtggaaa tgcataact ggagctgatg caggtacaag 300
tgtttcaggt ggaggatccg gtggcgccag tgcaggtaca agtgctaccg tgggtgctgg 360
tgtctccgga gggtgcaaat ttggtggtgg cgtaggagga aatgcaggag ga 412

<210> 4804
 <211> 358
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-009-Q1-E1-F5

 <400> 4804

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 ccaacaaaga gctcgacgac atgaactcga tctctagcag catcgagat ggagctaaat 120
 ggatgggtcaa caaatcaaa gggaagatgc agaaaccgct gccggagttc ctcaaggagt 180
 acgacctccc agcaggcctg ttcccgagg acgcgacgaa ctacgagctg aacgaggaca 240
 ccaagctcct gacgggtgtac atcgcgtcgc cgtcgaggt gggctacaac gactcgtcgg 300
 tgctgcgctt cgccaccacc gtgacggggg acctggagaa ggggaagatg acccacgt 358

<210> 4805
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-009-Q1-E1-F6

 <400> 4805

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 tcgtgggttg ggtgatcacg gcctgatggg gtcgtggcgc aaggcctacg gcgccctcaa 120
 ggactccacc aaggctggcc tcgccaaggt caacagcgaa ttcaaggaat tggatattgc 180
 aattgtgaag gcaaccaacc atgttgaatg cctcccaag gaacggcacg tcagaaaaat 240
 actcttggcg acctcagcaa accgccctcg cgcagacctc tcgtactgca tatacgcat 300
 gtcaaggaga ttgtccaaga caaagaactg gatagttgcg ctcaagacat tgatagtgg 360
 gcataagctt ctganggaag gcgattccat gttcaaagaa gagttcctgg cctactcatc 420
 cananggaac atcttgaca 440

<210> 4806
 <211> 416
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-F7

<400> 4806

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tcgtcaacgc gccacccgcc aacaccatcg ccgcggccga gcacggcatc gcgctgctcg 120
cctccatggc gcgcaacgtc tcgcaggcgg acgcggcgct caaggccggg aaatggcaaa 180
ggaacaagta cgtggggggtt tctctgggtg gaaagaccct ggccgtcatg ggcttcggga 240
aggttgggtc agaggtagcg aggcgagcga aagggttgg gatgcacgtg atagctcatg 300
atccctacgc ccctgccgac cgggcccggt ccctcggggg agagctgggt tctttcgacg 360
aggccatcgc aagagccgac ttcattcttc tccacatgcc gctgataccg acgacg 416

<210> 4807

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-F9

<400> 4807

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gaggtgttcg acaaggacac cttcagcaga gacgaccca tgggagacgc ggaggtggac 120
gtggcgccac tgatggaggc ggtgagcatg aaccgcggg aggagagtct gaggaacggc 180
gccatcatca ggtccgagcg gccgagcgcc aggaactgcc tcgccgacga gagccacgtg 240
tgctggagga acggcaagtt cgcgcaggac atgatectcc ggctcaggaa cgtcgagagc 300
ggggagatac agctgcagct gcagtgggtg aacttccctc ctggctcctgc tcctgctgct 360
gcaacaacca ggtgacctga tgatcgatgg tagctgctgt tcctgtcgcc attgcctcct 420
gct 423

<210> 4808

<211> 472

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-G1

<400> 4808

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 gcccgaggagt tcgtggacgc ccacaacgag ctccgcgcgc gctacggcgt gccgcccattg 120
 aagtgggaca ggaagctggc gcggcaggcg cggcgtctgtt ccaaccgcat gcgcaaggac 180
 tgcgagctcg tccacagcgg ccacaagtac ggcgagagcc tgttcaggag ccacgacgac 240
 tggaacgcca ccgccaagga ggccgtcttc tgggtggggca aggaggagtc catctacgac 300
 aggaacacgg agcagtgcac aggcggcagg gcgtacaagg agtgccggcca ctccgcgctc 360
 atggtcggca agaggagcac caaggtggga tgcgcacgag cagagtgcctt caagggaggc 420
 gtcttcatca catgcaacta ctatgccacg gacctcaaga agaagaacaa ga 472

<210> 4809
 <211> 418
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-009-Q1-E1-G2
 <400> 4809

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 ccattcccta ccggcgattg ggcgtggaag gcggtgtggc gtgggcaatt ctccgtcgaa 120
 gatcgcgctt cgtcgtgaag ccgctcacat ccgcggtcgg cgtccggtgc tgcctaaatt 180
 ttggtatctt cggattcatg gtaaaagcag atacaatgag gagcttgatc gtgacaaggg 240
 ttgtcgtcgc tccgaagctg tgcgaaaggg agcttcggct aaatcgaga aaagggaacc 300
 gacttaaaag ggaaaaggct gttcagtcct catagatttt tctataagcc aatagtaaatt 360
 gtaaagggca taattgtatt ttccataggc tgtgtcctgt gcctataaat agatgaac 418

<210> 4810
 <211> 468
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-009-Q1-E1-G3
 <400> 4810

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 gccttctctt cctccctggc atggaggaag tagctgtttc gcctatgatc gttgccgccc 120

tagtgctgga caacaatggc gctgacgcgg tctcctgcac tgccatccct agcgtaacaa 180
 taagcctaga ggagaaagaa aatatcaatg gggatgttcc cagcatcacc tcggccgcaa 240
 gcaacgagga ggaggcggtt ttcagtgtcg gagaatccac caaggacgat ggccatcgct 300
 tgacgatgga atgctccact cccgtctcct ccagtagccc ttccactcgc aagaagcgcg 360
 gggcgttcag cctcttcaag gcgatgttcc tgtccttcgg ccggagcgac gacagcatga 420
 agaagacaga cgacgacacc acgagcccca agaagagagc catcgcg 468

<210> 4811
 <211> 349
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-G5

<400> 4811
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 ccgcgcccgt ccttcgtccg cgcctccgtt ccgttccgtt ctgtctcgcg cgccgcccgc 120
 gccgcattca gggatggaga tggacaacat caccggcacc gtcacgtcgc cagcctcggc 180
 agacaacatg gagctcgcag cggaggctcc cgcaccagga cctaggacgc gtcacccac 240
 gatcacgcct ggcgtagtgt ccgccatccg agcagcgatc atcgccatcg tctgataata 300
 gaatgagtga gtcgggtgtc gtcgattacc ccgtcgactc ggaagaaac 349

<210> 4812
 <211> 339
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-G7

<400> 4812
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 cggttcgacg tgcacgtcat gctggtgtc atccaggta gcatctgcgt cagctaccgc 180
 atctgcatct ccatcatcat ggcgcacatc aatccgcatg ccgcgtcgtc tgctccgcg 240
 ctcttctccg cgatcgtgct cgtcatcggg gtcatgatgc ctttcaagct ggggctcaac 300

tcgatgatca cgctgacgct gctcgcgccg ctcagcatc

339

<210> 4813

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-G9

<400> 4813

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attccgagag cggctgaaga tacttggcaa ggtggctaata ctggaggatc ttcctttgag 120

tgcagcggag aggaagctaa tgcattgcgt taacgagaag cctgtccttt ctagaccaca 180

gcatgagttt tacctgggtg ataactactt cgagatcgac attgacatgc acagatttag 240

ctacatctca aggaaagggt ttgcaacatt tttggacagg ctaaaagcat gtgttctaga 300

tgttgggcta actattcagg gaaataaagc tgaagaactg ccggaacaaa tcttatgctg 360

tgttaggttg aatgggatag attacaccaa ataccagcct cttttgactc acgctgcct 419

<210> 4814

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-H1

<400> 4814

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aagaagagat ctgtgaaccc catctggcac gaggagctaa ctctgaccgt cacagatccc 120

agcctagctc tgaagctgga ggtgttcgac aaggacacgt tcagcaggga cgacccgatg 180

ggggacgcgg agatcgacgt ggcgccgctg gtggaggcgg cgaacgcgag cccggaggcg 240

agcctgagga acggcgccat catcctgtcg gtgcccgcga gcgccacgaa ctgcctcgcc 300

gacgagagcc acgtgtgctg gaggaacggc aagttcgcgc aggacatgat cctccgcctc 360

aggaacgtgg agagcgggga gattcagctg cagctgcagt gggtcagcat cctcctgct 420

gcag 424

<210> 4815
 <211> 394
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-009-Q1-E1-H2

 <400> 4815

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 gggcgacggc ccggaagcgg ctggcgagc ggcgcgcggg gtccggccac aggaccgtcc 120
 gcggcgacaga cggcaagctg tacgtggtga gggacccgag cgacgacgag atgatcatcc 180
 cgcggcaggg cacgctgcgg cacgccgtga tccaagaccg gccgctgtgg atcgtgttcg 240
 cacgcgacat ggtgatcgag ctgcggcagg aactgatcgt gaaccacaac aagacgatcg 300
 acggcgggcg cgcacaggct cacatcatgt tcgcacaaat cacgctgcat aacgtgcaga 360
 acgtgatact gcacaacctg cacatccacg actc 394

<210> 4816
 <211> 412
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-009-Q1-E1-H3

 <400> 4816

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 ggccggggcg ccgccctcct cagcgtgcg aaagcgacct caacatcagg gagcaccgct 120
 cctgcagcga ggtggccggc ggcaccgagg cgggctgcgc cgctgtgtgc tgctgcttcc 180
 cctgcgtcat ggtggaggtc gcggtgctcg ccacggtgcg cgcgcccgcg gcgctgtgcc 240
 gcaaggccgc ccgcgtgcgc aagggccgca ggcgctctgc ctccgcgggc caggccacgg 300
 agatatacga gctcctcgtg gacgacaccg gcgtcgtcga ggtggatgcc ggccgcccca 360
 atgcggtggc gctgcccgtg aagcccgct tgcagctgga gggaaaaggga ga 412

<210> 4817
 <211> 409
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations

<223> Clone ID: LIB148-015-Q1-E1-E4

<400> 4817

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cggcattaga ttctattgct gtttggttgg ctcacgataa tgatcataga aaagtggagc 120
aggcactggt gaaaaaagag gcaattcaaa agttagttaa gttcttccaa gactgccagc 180
aacagtatgt tgtccatata ttggactctt tcttgaagat aataatgaaa tcttctaggc 240
taaacacagc aatggccacc aatggcttga cagcattgct cattgcaagg ctttaaccatc 300
gagacgctat tgcncgcctg actctgctga aactcataaa ggttgtctat gagcatcatc 360
ctcgaccaaa acaggtcata gtagagaaat gactccctca gaagctaca 409

<210> 4818

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-E6

<400> 4818

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tgctgggctt tgaggatagg aagctgcca tccaccacat ccctggcccc gaaggggtcc 120
gcgggcgcaa ctctgacaac acccttatca aggagaagct tggctgggcc ccgacgatga 180
agctcaagga tgggctgcgg ttcacctact tctggatcaa agagcagatc gagaaggaga 240
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ccgtgcagct gggctccctc cgcgccgccg acggcaagga gggcctctaa gcgacgaccc 360
aaggctgggg ctgtcttcgt ccatcacagc tggcgtagca tggcaggata tactgtttgc 420
ggtagaatat cac 433

<210> 4819

<211> 358

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-E7

<400> 4819

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tgaagcgccg ctcagaggct cgccacggac gaggtcaaga cggccgccac tcacgaggcg 120
cggcgggcgc tgaacctctg taatacctac tacctgtacg ccgccgacaa actcagctcc 180
tgcaactcgc gccatcaagt ctcccgctca ctctctcacc atcctcgcca cgataaccat 240
gctggttcat gacacgcaaa actgcaacta agaattctcg aaagccgtct ccaggaaccc 300
catggctgac cacaacaggt cgctcatcgt gatatccgat atctgacaca cgcgctcc 358

<210> 4820

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-E8

<400> 4820

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tcaaggagaa gagcagcacc acggccgtga tccgctacaa gggctccagc gccccgccgc 120
cggccaagct gccggagggc ccagcgggt gggcggtgct catcaaccag tgcaggtcct 180
tccgctggaa cctgacggcc agcgcggcgc ggcccaaccc gcaggggtcg taccactacg 240
gccagatcaa catcacccgc accatcaagc tcgccatggg ccgcggcaag gtcgacggca 300
aggagaggtt cggcttcaac ggcgtgtcgc acgtggaccc ggaaaccccc gtgaagctcg 360
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<210> 4821

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-F1

<400> 4821

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atcaggtaac tactgaccag caacacccca gcaccacat tttgcagcat ttcttctgtt 180
gtggcacttc cttgatcaca ttcacatgta atatctggga gttctgatct agaactagat 240

tgaagtattg aattgctact gtggaggtgg ctgctgctta tagctctcat cccaagtgag 300
gagcatgcct tgtcctcagc aaggtecttg cccaggaatg taggcagctt tactcagccc 360
tttgaccttg atggcacata caggttgaaa gattaacgat gccaaaatga tatggcttgt 420
ata 423

<210> 4822
<211> 423
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-015-Q1-E1-F10
<400> 4822

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gacacttttg ggtttgccg gatcatacat gatggcctca tgttcaagca gaacttctcc 120
attaggtcct atgagattgg ggctgatagg acggcatcta tagagacaat gatgaaccat 180
ttgcaggaaa cggcacttaa tcatgtgaag accgctgggc tgctaggtga tggattcggc 240
tccacaccag agatgagtaa acggaactta ttctgggtgg ttagccagat gcaggctatc 300
gtcgagcggt atccatgctg gggtgatact gttgaagtaa atacatgggt tagtgctaata 360
ggtaaaaatg gaatgcgtan ggattggcat atacgtgatt ctatgacagg ccacacaata 420
ctg 423

<210> 4823
<211> 448
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-015-Q1-E1-F11
<400> 4823

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cgccttcacg cctccctcac caaataaggt cccgcccttt tccgacattc acagggggga 120
caggaaatca gcggccatgg cctcgattcc ggcgacgacc ttcgccgtca tcttatccgt 180
cctcttctgt gccgcggctg gcaccgccgt cgacaacgac ctccccgact acgtcatcca 240
gggccgcgtc tattgcgaca cctgccgcgc cgggttcgtg accaatgtca ccgagtacat 300

cgcgggcgcc aaggtgaggc tggagtgcaa gcacttcggc accggcaagc tcgagcgctc 360
catcgacggg gtgaccgacg ggaacggcac gtacacgac gagctcaagg acagccacga 420
ggaggacatc tgcgaggtgg tcttggtg 448

<210> 4824
<211> 412
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-015-Q1-E1-F2
<400> 4824

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gggacatggg gaaaggcact tgggtgcagag gtctatgact gcaacaacat ggtggagcag 180
gagctgcctg gaggcgggct cctcgtgtac cagagcttct gtgctgctga agacgctggt 240
gctacctcgc ccaaactctgt tttccactgc tttgacggcg agaacgtgga gagtgctcct 300
cctcctatga agaaggacta caaactggct aatcttctat gctgggagga ggaagcggat 360
gccatggagg agaaggcggg agtgcttgat gagtaagacg ggcttctggg gt 412

<210> 4825
<211> 446
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-015-Q1-E1-F3
<400> 4825

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gaaatgtatt gaaatgcttt gtgctcctga tggtagctt cctgagaagc tgaggaatct 120
agaacctcgc cttattgaac atgtcagtaa tgaaataatg gatagggatc ctaatgtccg 180
ctggaatgac atagctgggt tggaacatgc aaagaagtgt gtgacagaga tggatgatg 240
gccactgcta cgtcctgata tattccgtgg ttgtcggctc cctggaagag gtctactggt 300
gtttggacct cctggaacag gcaaaacct gattggaaag gcaatagctg gtgaagccaa 360

ggcaacattt ttctacatat ctgctagttc actaacaagc aaatggattg gtgaggggtga 420
 aaaacttggt cgggcacttt ttggtg 446

<210> 4826
 <211> 439
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-F4

<400> 4826

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 gtggccgtgg aggtgccacg ggtgcacctc gctgacgttg cgcgacagcg cgttggcgtt 180
 ctggagcagc acgtcgacgg tgggtgttgtg cgccaggacg tacacgttgt cccccaccgt 240
 cgtgttgggg ttccggcggcg gcagcgtcac gtcgtattcc cggctgaacg tctccgcggg 300
 gcgcgccgcc gccagcgtcg acttgagccc catcttcagg gagcccagggt acggcgtggc 360
 gggcagaaac atggacacgt tgttgatggg acacctgatg cgcccgtcca tccggttctg 420
 cgtgttgagc aactcgatg 439

<210> 4827
 <211> 401
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-F5

<400> 4827

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 aaggcagtgc tgccaaggca cctgaggctg ccaagagaac tgctgcccc gctgaagcac 120
 ccggagccgc gtccaccccc gtcgccgcgg ctgccccatc atcgctgtct aggaagtctg 180
 gtccagctac cgcgccagcc accgcctcta ccccccttc ttccacggac gaggagtga 240
 gcccttcccc gccagcatcc accgccggcg cgtcccctgc ggctgaggga ccggctgctg 300
 atgactccgc cgggtgtgtg gcccttggaa gtggagctgc catcgccggc gttgccgctg 360
 ctgttgctac catgattctc ttctactaaa ctcaacgacg a 401

<210> 4828
 <211> 324
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-F6

 <400> 4828

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 accccatggg gaagtttgac aaggagctca accagatggc cagcaactgc atggctcttg 120
 caaacatgat atgaaccacg catgcaaccc cagcgtgagg tgccatcgca tgcaggggaat 180
 gcttgcattc atttttcatt taattaagaa ttcattgaaa ttatgagtta tatatattga 240
 gtaactctat gtatttgttc ctgacctgca ctatttattc aatagtatgt catgaaacga 300
 ggtagagcgc ctttcattgc cttt 324

<210> 4829
 <211> 423
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-F8

 <400> 4829

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 ctgcaaatgt gcgcaagatg tttttggaca tggacagtga actatttgaa gagtgccagc 120
 agcagtacat ggagaaacaa gcgaaagcca aagagataca ggaacaacga gaatcagcat 180
 ggagacaatt ggaagctggt gttgctgcc aaggctgctgg agatgacatg gttttggtca 240
 actagatgat agctgctcac ttatttcatg agcgtcatgt gcgcttatcg aggcaacaag 300
 gtatcgggtgc tagttgcggt gctcttatat caacattggt gacttgggac tatcagatcc 360
 atgttccttg catcagtgc aaaaaatgcg gaccgagttt gaacacattg gtggcaacga 420
 aag 423

<210> 4830
 <211> 453
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-F9

<400> 4830

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atgagagcct tgttcctcct ggtcctcttc tgcacgtgc atggtgagaa ggaagagtca 120
aagggcatcg atgcgaaagc gtccgggcct ggtgggtcct tcgacatcac caagttgggc 180
gcctccggca atggcaagac agacagcacg aaggctgtgc aggaggcatg ggcatcggcg 240
tgccggcgca ctgggaagca gacaatcctc atacccaagg gtgacttcct tgtcggacaa 300
ctcaacttca caggcccttg caagggcgac gtgaccatcc aggtggatgg caatctgctg 360
gcgaccacgg acctaagcca gtacaaggac catggttaatt ggatcgagat tctacgcgtg 420
gataacctgg tcatcacccg caagggaaac ctt 453

<210> 4831

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-G1

<400> 4831

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ccgccgcctg ctcgatccgg tgggaactcg ccgctgccgg gttgttttcg ctgggtgatt 120
aaggctcggg attcgagatc tacgagagtc gcgggcaagc agccatgagc gaggtgttcg 180
agggctacga gcggcagtac tgcgaggcct ccgcctcgct ctcccgaag tgcaccgctg 240
cctccgccct cgatggggag aagaagaagc agaagctgtc cgagatccaa tccggcgttg 300
aggaagctga atcgctgatt cgtaagatgg acctggaggc aaggagccta cagcctagca 360
ttaaggctgg tttgcttgca aagctgaggg agtataaatc tgacctcaac aacgtcaag 419

<210> 4832

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-G10

<400> 4832

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cgccgccaca gccacatggc ggacgacgcc gtcgccgccg gagcgggcgt ttgctgcgca 120
gggccggcct cgctgtcttc tagcaggaag cagcagcagc agcccagcga cgccggctgc 180
ggcagcagca gcagcgacga ccactaccag cacgacgtga tcatgctgag ggggacgagg 240
agcgggcggg cattcccgcc gccgatctcc gtgatcggca agggcgggcg gccgtggctc 300
tgcttgcggg cgcaccgca ggggtggacgc ctctgtctgc ggcagatgca cctgccgtcg 360
cacgagctgc tgcagccctg c 381

<210> 4833
<211> 441
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-015-Q1-E1-G12

<400> 4833
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aaggacgaga aggacgtgga ggacgtgaag gtgacggggg gcacgctcgc cggcaccacc 120
aacggcctgc gcatcaagtc gtacgaggac tccaagtcgt cgctcaaggc caccaagttc 180
ctgtaccagg acgtcaccat ggacaacgtc tcctacccca tcatcataga ccagaagtac 240
tgccccaaca acatctgcgt caagtccggc gcctccaagg tggcgtcaa cgacgtcgtc 300
ttcaagaaca tccacggcac ctccaacacg ccggaggcca tcaagctcaa ctgcgccaac 360
aacctgcctt gccagggcgt gcagctcatc aacgtcgaca tcaagtataa caggtccgac 420
aacaagacca tgtccgtctg c 441

<210> 4834
<211> 267
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-015-Q1-E1-G2

<400> 4834
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gaactagcaa ggcttcttgc agaagcactt gcgcgtggcc acgacctgct tgcactcgcc 120

accgggaaag ctctccttca tgcacacatc ggtcttgcta attggtgatg ggtgcttcat 180
 taatttgatt tgatgggtct catggctacg agaaacaaaa ctacttttga taaaatgcag 240
 ggcataaaaa gcgtttctgc agtcctt 267

<210> 4835
 <211> 430
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-015-Q1-E1-G3
 <400> 4835

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 cgccgccatc gccatactcg cactcacgag agtgggtcgt gcgaaaattg gccgccgggc 120
 aattacgcgg tgactccaga cgggtgagcg gatcgctcgtt tgggogatta gaccttcgtg 180
 ccaccgaaat cgcgagctgc aagaagaatc cgcgggtcagt tcgtcgagct ctgcggggcg 240
 catcatctcg ggttctctac cggcgagcgg tgaggtcacg aggatctgaa gaatcactct 300
 ggtaactgga atctcaagtg ccaggtcaag aacaggtacc acaagatgag gcacatggag 360
 gatgctgtga tgagttcgtg agtgggtctag gtcgtcgtct ccagtcaact ttgggttgcc 420
 ggaccgttgt 430

<210> 4836
 <211> 392
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-015-Q1-E1-G4
 <400> 4836

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 gcctccgcca ccgacatacg cgccgcttac cggaggctcg cgatgaagtg gcaccgggac 120
 cgggtgggcca gcgaccccg cgccggccggc gaggccaatc agcggttcca gcggatccag 180
 gaggcatact ccgttctgtc ggacaagggg aagaaggcca tgtacgacgc cgggctcttc 240
 gacccctctg acgacgacga ccaggatttc tccgacttca tgcaggagat gctggtgatg 300
 atggatagcg tgaaaaacga gaagccggac acgctggagg acctgcagaa gatgctggag 360

gacatcgtga agggcgacgg cggnggcggg ag

392

<210> 4837

<211> 356

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-G5

<400> 4837

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gccagctcgc gaaaataatg aagagccgca gcatggcatc atcggccgcg ctcttggtgc 120

tagccctcgc gctagtggcg gccaccgccc cacaggtagc ggaggcaaag aagaagagag 180

cggcggagag cggcgaggcg gcggaggcga agaagatcca ggacgacttc tgctcgacgc 240

tgtgcgaggg caagaagggg acggacctgg tcgtgtgcaa ggagtccctgc gcgctctccc 300

agcagtccaa cctggtgctg tacggcagga tccagtgcaa gggcaagtgc accgag 356

<210> 4838

<211> 370

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-G6

<400> 4838

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tgacccaaag ctacatgacc acctagaaac tcttggcgga ggtgactacc tttttgcggt 180

ccgaatgttc atggtgctat ttaggcgtga agtatcattt ggagactcct tatacctctg 240

ggagatgatg tgggctctag aatacgacct tgacattttc ttcgcaacat gcgaagaaca 300

aggtgcagta cataaaaaata aagtttctaa atccaaactg aaaggactgc gccattttgg 360

caagtgggat 370

<210> 4839

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-G7

<400> 4839

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agcagtagca gcagccggcg tgtgacgctg gtactgctcg gtctccgcct gctgcttctg 120
gttggtgttg cgcaggcggg agtggagttg gtgcctgctg atgataatat cgccgccgcc 180
gctgctggca cggcgggtgga cgatggcgag ccgcctcagc agtgcgcgac cccgggtgagc 240
gtggaggagg cgtgccgcgg cgcgtccgag acgcacgccg gcgtggccta cgaccactgc 300
atggcgctcg tgggcgcgga cccgcgcagc aaggaggccg gcaacaagaa catgcacggg 360
ctggcgggtgc tggccaccag ga 382

<210> 4840

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-G9

<400> 4840

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atttaaggta cctcaatctt gatggggctc aggtcagaga cataccttct tccattggat 180
ttctcataaa cttgcagacc ttgagccttc aagggttgcca aagcttgag agacttcctc 240
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atgtaccaaa ggggtgttgg aaattgaagc atctcaatca tctagatggg ctaatcattg 360
gtcatgacaa caatgcgcct gagggttgtg acttagatga ccttaaagca ttgtcagaac 420
ta 422

<210> 4841

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-H1

<400> 4841

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cccaccacat ccggccagcc caacgaaaat gtcgcgcgcc acagctgagg tcctcttcta 120
cctcctcgcc gtcgtgccc tcagcgcggc cgaggcaccg gcagagtcac cgaaggcagg 180
cagtctcgcc aaggcaccgg ccgagtcacc gaaggcaggc agtcctgcag ctcttgccaa 240
ggcaccggag tctgctgcca cgagaactgc ccccgctaag gcacctcaag ccgcctccac 300
ccccgcccgtt gccgctgccc catcgctgctc gtcgtctagg aagtctgggc cagctgccgc 360
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<210> 4842
<211> 414
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-015-Q1-E1-H10
<400> 4842

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actggctgga cgctaaagcg acatggtatg gcaagccgac gggtgccggc cccgacgata 180
acggtggcgg ctgcgggtac aaggacgtga acaagcccc cttcaatagc atgggcgcat 240
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gcgataagcc tgtggagtgc tccggcaagc ccgtgggtgt gcacatcacg gacatgaact 360
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<210> 4843
<211> 455
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-015-Q1-E1-H11
<400> 4843

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tccatcgta gtgaaatcac cgctccttc accactgtta agttcgccgc cgccaccagc 180

gcccgtgagg tcacctccac cgctaacgaa attatcacct cctccaccac cgataaggtc 240
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tccgatgcaa tccccctccac cgcttgcctc agtcagctca ccaccaccac ctataaaatc 360
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gaaatactct tcaccaccta ctccagtcaa ctac 455

<210> 4844
<211> 436
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-H12

<400> 4844

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agtacaacat gcccgacaac gccctccgct gcggcaaggt cgtggggctg ccgctgccgc 180
catcctacgc ccccgcgcg ctaaagacgac gaaggcgccg ttttcacctc gtgttctgac 240
catccagtct aactaatcca ttctgtgct gctcggcgaa ataaaatcat caaaaagaac 300
aaagacgaag gaagcctagg gaagggagaa gggacgttgg gtgggggtga gccaaatgag 360
aacgcacgga tatatctatt gatgtaatct tgagatgcc tctcaaata ctgtaatggg 420
gtttaaaaaa caatca 436

<210> 4845
<211> 408
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-H2

<400> 4845

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gattccggcg acgaccttcg ccgtcatctt atccgtcctc ttctgtgccg cggtggcac 180
cgccgtcgac aacgacctcc ccgactacgt catccagggc cgcgtctatt gcgacacctg 240

ccgcgccggg ttcgtgacca atgtcaccga gtacatcgcg ggcgccaagg tgaggctgga 300
 gtgcaagcac ttcggcacccg gcaagctcga gcgctccatc gacgggggtga ccgacgggaa 360
 cggcacgtac acgatcgagc tcaaggacag ccacgaggag gacatctg 408

<210> 4846
 <211> 424
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-015-Q1-E1-H3
 <400> 4846

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 ctgcctcctt tcctcctcgt cgcctccgcc accgtggctt tcgccgcgga ggccccggta 180
 gcctcgccga agcattcggc ctccacgcgc tcaaaggcgc ccagcagttc gcccgacaag 240
 tccgagaagg cccccacggc gtcggctgag aatgctgcag agacgccgaa ggcaaccccg 300
 gccaaaggccc cggcggcggc ctccaagtca gaggcacgcg cttccgaggc gcccgactcc 360
 gggtcacgcg ctgcgtcacc tactagcgag agcgccgcgt cagagaaggc cccgccgggtg 420
 cccc 424

<210> 4847
 <211> 368
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-015-Q1-E1-H5
 <400> 4847

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 gttcataaag tgcgtcacgg tcggggacgg cgcgctcggc aagacctgca tgctcatctc 180
 ctacacctcc aacaccttcc ccaccgacta tgttccgaca gtgtttgata acttcagtgc 240
 caacgttggtg gttgatggta atactgtcaa cctcggcctc tgggacactg caggtcaaga 300
 ggattacaac agactgagac cactgagcta tcgtggagct gatgtttttc ttctggcttt 360

ctcactga

368

<210> 4848
<211> 453
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-H6

<400> 4848

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gccgtgctag cggtgggcgc ggatgtcgcc aacgccggcc acgccaagcc cctgacgcct 120
ggcggggcgcg tggtagacca caaccacggc aagttcacgg ccggggccgtg gaaacccgcc 180
cacgcgacct tctacggcgg gcgggacggg tccggcacca cggcggggcg gtgcggggtac 240
aaggacacgc gcgcgcaggg gtatggcgtg cagacggtgg ccgtgagcac ggtgctgttc 300
ggcgacggcg cggcctgcgg cgggtgctac gaggtgcgct gcgtggacag cccacagcggg 360
tgcaagccca gcgcggcggc gctgggtggg acggcgaccg acctgtgccc gcccaacgac 420
cagcagtcgg cggacagcgg cgggtggtgc aac 453

<210> 4849
<211> 358
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-015-Q1-E1-H7

<400> 4849

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tggaaggcca acaccgcta caccgcaaaa taattaactt tagtgctgac aatacttta 120
gccgacctat gctagctata ctagattggg ttggatccca agcaatgcat tacacatgca 180
tgcattggac cgtgatatct atttctacc actacctat tacgacagtg atgctggcgc 240
caacaatgat ggtgtcatcc tctttctcca tctttctcat ctccatatat agctagagt 300
agacttcgct gttgtttaaa agagaagagt taagaaatgg attgacaagt tatataat 358

<210> 4850
<211> 431

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-H8

 <400> 4850

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 gacggcgctct ccgtgatggg gtccagcgat atctggatcg accacctgtc catgagcagc 120
 tgcgcgggacg ggctggtgga cgcggtggac ggctccaccg ccatcacctg ctccaacggc 180
 cacttcacga ggcaaggacca cgttatgctg ttccggggcca gcgacgccgc gtccaaggac 240
 agggagatgc aggtcacctg cgccttcaac cacttcggca aggggctggt gcagcggatg 300
 ccgcgctgcc gtcacggctt ctccacgtg gtgaacaacg actacacgca ctggctcatg 360
 tacgccatcg gcggcagccg gaacccacc atcatcagcc agggcaaccg ctttcgcgcc 420
 gtcgacgaca g 431

<210> 4851
 <211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-015-Q1-E1-H9

 <400> 4851

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 ggcgcagggc aacggctgtt ccagcgtgat gatgaccctg gcccctgca tggacttcat 120
 ctccagcaag gcgtcggagc cggggatctc ctgctgctcg gtgctggctg gagtcgtgca 180
 gaccgacccc cgctgcctct gcatggtcct ggacggcacc gccacgtcct tcggcatcgc 240
 catcaaccag accagggcac tggagctccc cggcgtctgc aaggtaagg cgccgccgct 300
 cagccagtgc acaggcatgt catgtgtcag gtcacgttc aaatgcaaac cattgccagt 360
 ttctgttgcc gcttagaata ctagtacgta cctggtctca ggcgtccctg cggcacctgc 420
 accga 425

<210> 4852
 <211> 373
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-A1

<400> 4852

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catcagcggc accaccatcg cegtcggcga cgactgcgtc tccatcggcc ccgggagcaa 180
gaccatccgc gtgaagggcg tcaagtgcgg cccgggccac ggcatcagcg tcggcagcct 240
ggggcggtac aaggacgaga aggacgtgga ggacgtgaag gtgacggggg gcacgctcgc 300
cggcaccacc aacggcctgc gcatcaagtc gtacgaggac tccaagtcgt cgctcaaggc 360
caccaagttc ctg 373

<210> 4853

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-A11

<400> 4853

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catgtctttc accggcacgc aggacaagtg cacggcgtgc gacaagaccg tccacttcat 120
cgacctctc acggccgacg ggcctatcta ccataagaca tgcttcaagt gcagccactg 180
caaaggggtc ctctcgatgt gcagctactc ctccatggac ggtgtgctgt actgcaagac 240
ccacttcgag cagctcttca aggagaccgg gagcttctcc aagaacttca cgccagggtg 300
caagtcatca gacaaggggtg aactgacaag ggccccaagc aagctgtcgt ctgcattttc 360
tggtaccag gataagtgcg cagcatgcc aaaaacagtg taccgctgg agaagttaac 420
tctgg 425

<210> 4854

<211> 436

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-A12

<400> 4854

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 gcctcgagga tatcgacgcg tgctccgccg agtgcgaggt ccacatcgcg caggagtggc 180
 tcgacaagct gccgccaccg tcctacgagg agcggtagct gctcacgcgc gcgtccagga 240
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 atggcatggt cgtcgctgtc cccgagccta agccgtggga catcccgtaa tggcctgccg 360
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 tcaagcttgt gcgcct 436

<210> 4855
 <211> 382
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-016-Q1-E1-A3
 <400> 4855

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 aaccgatcgt caggcggcca gccatgggca agcacgggca cggcaagtgc cacgacgtgg 120
 aggcgtgcta cccgccgggg gcagcgggcg gcggcaagta cccgtacatg acggagaacc 180
 cgcagctgcg gtgggccttc atccgcaagg tgtacgtgat cgtgtgcctg cagctgctgc 240
 tgacgggtggc cgtcgccgcg acggtgaacc tgggtgcgcgc catcggggac ttcttctct 300
 cccgcaccat gggcgccatg ttcgccatca tcggcgatcat cgtcgcccc atcctcgtga 360
 tgatcccgat gatcatttac cg 382

<210> 4856
 <211> 433
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-016-Q1-E1-A6
 <400> 4856

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 ggcattggagg aagtagctgt ttcgcctatg atcgttgccg ccgtagtgct ggacaacaat 120

ggcgccgacg cgggtctctg cactgccatc cctagcgtaa caataagcct agaggagaaa 180
gaaaatatca atgggggatgt tcccacgata acctcggccg caagcaacga ggaggaggcg 240
ttgttcagtg tcggagaatc caccaaggac gatggccatc gcttgacgat ggaatgcacc 300
actcccgctc cctccagtag cccttccact cgcaagaagc gcggggcggtt cagcctcttc 360
agggcgatgt tcctgtcctt cggccggagc gacgacagca tgaagaagac agacgacgac 420
accacgagcc cca 433

<210> 4857
<211> 115
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-A8

<400> 4857
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tcggctcctt ctttgctttt gtgagctccc tgtgtcgctg ggtgtgtgtg ctgcc 115

<210> 4858
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-A9

<400> 4858
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atcaaccttg cctaccgcga cgcaagaggc agcgatccgt atgtcgtcct acgacttggc 180
aagaagaaac ttaagacgag cgtgaagaag agatctgtga accccatctg gcacgaggag 240
ctaactctga ccgtcacaga tcccagccta gctctgaagc tggagggtgt cgacaaggac 300
acgttcagca gggacgaccc gatgggggac gcggagatcg acgtggcgcc gctggtggag 360
gcggcgaacg cgagcccggg ggcgagcctg aggaacggcg ccatcatcct gt 412

<210> 4859
<211> 405

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-B1

 <400> 4859

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 gaggggctca acaagctggc tgaagccttc gacgtcgcgc tggggccgct cctcgccggc 180
 ctcgccgaca agctgccggg gctgacctac tcgctggcca actccttcg cctgacgcag 240
 gacgccttcg cggaccogaa ggcgtcaggg tacagcgacg tggccagcgc ctgctgcggg 300
 agcggggcggc tgctggcgga ggcgactgc ctgcccaact ccaccgtgtg cagcgaccac 360
 gacagccacg tgttctggga ccgctaccac ccggcccagc gcgcg 405

<210> 4860
 <211> 433
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-B11

 <400> 4860

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 tgagaagaat acatgacacc cgtgtcaact aaccgcatca ttttttagtt gatggttctt 180
 atgccatgga aattcaacgg atgttacagc cttttcgtaa tagatcatgt taaaaagcac 240
 gtgactttta tcgactttac accgacccaa gattggtata agcacatgcc atacaagagg 300
 ttcgcagaag cgattatcat ggccttaaag aaatataaga ttacctacag caagaaatgt 360
 tctggatggg aagaggatat ttttaagtga aaacatacaa tttggaatgg tgttccaagt 420
 gacttaagag agt 433

<210> 4861
 <211> 444
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations

<223> Clone ID: LIB148-016-Q1-E1-B12

<400> 4861

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tcctcaatgc atttgcggtt ttttcagtcg acattgcttc aataggacat agcatttcat 180
taaagtttgc agggcatcgt agaacgagaa tggttctccc ttcaaaaagc aaaacacggg 240
aaactcgtat agtcgatcga cgaccatgca tcacatttcc ttttcctcga tcatcgctta 300
tttcgcgga aaacaacgaa ggaaacccaa ccaaggaaac gcatgctatt gcttaagcat 360
cgccggagga gctggtcgat cgctcgctca ctcaggggcc tgattgttcc ggtcacctgt 420
cgtcgtcgtc gagctgagac acgc 444

<210> 4862

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-B2

<400> 4862

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tgcacggccg cctctattgc cgtcgcctgg ggcttctgct gcgttaccat gggccaaaca 120
gcgaggaaaa tgccgagaga gaggtagaga cagtttggtc gtcgagtcac atggaggggtg 180
ccctggtggc cggggaatcc ttcacctgcg gggtgctaca tcgccgggct gctgcatcgt 240
ggctctgctc tactaccagg gctgactcca ttgccggaca gccaaaactc tcggtcgagt 300
ctctgaaggc cgtctgtccc tgttccttcc gaacgttggg gattatgata ctggggcgcc 360
taatcgctgt cgccggtgag attcggccgc cagattccaa ggccgcgcg ggctg 415

<210> 4863

<211> 335

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-B3

<400> 4863

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 atggttggtc attggtgttt gtatatacta tcgtcgcgcc gccgcctcct cctccgtcat 180
 cgtccgaccc caccgtccaa cggcatggcg gccggccgcg acgacgtcaa tgcattggtgt 240
 gcgatcgagc caggccagct gcgtgcccc tgcccagcca gccagcaggc agatcagacc 300
 gccggccgcc gccttggcgc tcagttcaag ctgcg 335

<210> 4864

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-B5

<400> 4864

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 gaggaaccag ataccggcg gggcgatcg atggctccgc gcagctcatc ggcggcgacg 120
 tgctgtgcc tcgtctcgc cgcggccacg ctggcgctgg ccacggggc gcaaggagga 180
 ggaccatcgg catcgggcg ggacctggac aaggtcacgg ccgagacctt cttggacatc 240
 gagatcgacg gcaagcctgc aggcgggatc gtgctgggac tgtttgggga caccgttcct 300
 aaaacagcag agaacttccg agcactttgc acaggggaga aaggaattgc cacgtccggc 360
 aagcctctgt ggtacaaagg gtcgacgttc cacaggatca tcccgggggtt catgac 417

<210> 4865

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-B6

<400> 4865

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 tacgatgctt ctggtatcag attgcatgct ggaaagcaag cagcgggtact gaaccaata 180
 gtttgtgaac ttccttctga acatcccttg tctgaaacaa gaccactgcg agaactttta 240

ggccatacac caacccaggt tgttgctggc gcattgcttg ggtgtacgat agccacagca 300
 ggacaattat tcgtttgaac tccgaaggtg caggagaaat gttgtagcat ttgcatcgcg 360
 gggacttgag aagaagtttc tctagtgttc tgctacttta ggtattggta agattttcaa 420
 cttggtgctg tagtgttgtc caat 444

<210> 4866
 <211> 425
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-H2
 <400> 4866

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 aagccgccgt ctccacaccc aaggttgctc ccgaagccac tccaatctcc gttgaggttg 180
 cggctgatga acaggtagct gagaaggttg tggaggagga gccggtgcg ggggccgacg 240
 ttgagcatca gaaggctaata gaggtgctcg ctccagaggc ggccgtcgcc gagccccacc 300
 acaaggagga ngaagccgtg gagaagaccg tcgtcgagga ggagaagcca ggggcagcag 360
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 agaac 425

<210> 4867
 <211> 389
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-020-Q1-E1-H3
 <400> 4867

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 cgcgcatca cgctgctcaa cagcaagttc ttccacctca acatcttcga gtgcaagaac 240
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cacatcggcg actccagcaa cgtgaccatc agcagcacca ccatcggcgt cggcgacgac 360
 tgcattctcca tcggccccgg gagcaagat 389

<210> 4868
 <211> 441
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-H5

<400> 4868

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 gagtggcacc gtgttcaggc cacagaggac atgtctgccg cacgggctgc agcggaggta 180
 ggtgctttct ctcaggccgt ggcaatcctg gaagcccgtg ggaggatact ggaagcacia 240
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 cagagagtgg agaaccggcg gaagtacgag gagtcaggca gagctttcat gctggcaggc 360
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 actattcata cctaccagac g 441

<210> 4869
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-H6

<400> 4869

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 gcatgactat caccctcgag gtggagtcgt ctgacaccat tgacaacggt aaggcgaaga 180
 tccaggacaa cgagggcatc cccccagacc agcagcggct catctttgct ggcaaacagc 240
 ttgaggacgg gcgcacgctt gctgactaca acatccacaa ggagagcacc ctccaccttg 300
 tgctccgtct caggggaggc atgcagatct ttgtgaaaac cctgaccggc aagactatca 360
 ccctcgacgt ggagtcctct gacaccattg acaacgtcaa aggccaag 408

<210> 4870
 <211> 325
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-020-Q1-E1-H7

<400> 4870

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ggagtcgtct gacaccattg acaacgttaa agccaagatc caggacaatg agggcatccc 180
cccagatgaa cagcggctca actttgctgg aaaacagctt gatgacggac gcacgcttgc 240
tgactacaac atccacaagg tgagcaccct ccaccttggt ctccgatctc aagggacgca 300
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<210> 4871
 <211> 433
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-020-Q1-E1-H8

<400> 4871

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aagccatgga gcacaaggag gctgggtgcc agggccccga gggacccatc ctctgcatca 180
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acggcagcga cgccgtcatg gagccggttg ttgctggcag caacacggta gtagctgttg 360
cccaagttga gttgcanaca atgaacgtgc agcagcccgc tgatgttgcc ggaccacgcy 420
aggggggtggc ggc 433
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<210> 4872
 <211> 104
 <212> DNA

<213> Zea mays
 <223> Clone ID: LIB148-021-Q1-E1-A10
 <400> 4872
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<210> 4873
 <211> 428
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-021-Q1-E1-A11
 <400> 4873

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<210> 4874
 <211> 436
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-021-Q1-E1-A12
 <400> 4874

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 cccaagacgc ttgaggggca ggccccagct gaggccgcgg tctccacacc caagggttgcg 180
 cccgaggcca ctccaatctc cgttgagggtt gcggctgatg aacaggtagc tgagaagggtg 240

gtggtggagg agccggtgc ggcggccgac gttgagcatc agaaggctaa tgaggtggtc 300
gctccagagg cggccgtcgc cgagcccgat cacaaggagg aggaagccgt ggagaagacc 360
gtcgtcgagg aggagaagcc agcggcagcc gccaatgcag aggaaaatgt cgccaccgcc 420
gccgagacca cgacga 436

<210> 4875
<211> 289
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-021-Q1-E1-A2
<400> 4875

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accattgtca ccgagtacat cacggagcgc agtgtgacgc gcgagtgcac gcacatcagt 180
acctggatgc cccatcgctc cagcgacggc gtgacagatc ggaaaggtag gtgaacgatc 240
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<210> 4876
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<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-021-Q1-E1-A4
<400> 4876

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ctcagatttt atccctcctt gtagcaactt ccaagaactc gtccattgat tcatttggtg 180
tcttgtagca aacatttggt ccaacatgtg tcatagatat tttcaatggg ttaatttcta 240
ataaaactat gtttacaagc aacaacatgc aatcgtgacg gtgatcagag 290

<210> 4877
<211> 76
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-A5

<400> 4877

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caaaattaaa ttaacg 76

<210> 4878

<211> 384

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-A7

<400> 4878

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cccgcgcgcg ccgtctctac ggctcgtaaat aagccgcgcg atccagggat ggagatgaag 120

aagatcgctt gcgcgcgtct cgtcgccgcc tcggccaccg tggcgctggc cgcggaggcg 180

ccggctccgt ctcccaccag cggctctctc gcggtcgcac ccgccatcgt cggggccgcc 240

gtggctctct tcttcgcgta ctacattcac tgagccgcgc gacgaggagc cggagccgga 300

gggaagagac caaggtgggg ggagagactt ggctgcgctg cgctgctctg ctgctcccg 360

gcattcccga tgcgtggggc tgct 384

<210> 4879

<211> 342

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-A8

<400> 4879

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cgccgcccgc tctacggtcg ctaataaacc gcggcatcca gggatggaga tgaccaagat 120

cgcttgcgcc gtgcgtcgcg ccgcctcggg caccgtggcg ctggccgcgg aggcgccggc 180

tccgtctccc accagcggct cctccgcggt cgcagccgcc atcgtcaggg ccgccgtggc 240

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cagaccatag tgtggggaga gacttggctg cgctgcgctg ct 342

<210> 4880
 <211> 443
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-B10

<400> 4880

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 tcagcagttc cttcagcccc aactccagat gttgctgaag cacaggcccc agttgctgag 180
 gaggacgacg acgatgatgt tgaccttttt ggtgaggaga ccgaagatga gaagaaggct 240
 gctgaagagc gtgctgcagc tgccaaggct tctggcaaga agaaagaatc tgggaagtca 300
 tcagttttac ttgatgtgaa gccatgggac gatgagactg acatggccaa gctcgaggaa 360
 gctgttagga gtgtccagat ggaagggtg ctctggggcg catccaagct tgtcccagtt 420
 ggatatggta tcaagaagct gca 443

<210> 4881
 <211> 412
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-B12

<400> 4881

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 ccgtcaaccc gctggttgcc ggcattctgt ctgcgcccc attcccagag gtttgacagg 180
 ccacagccgg gcgccatgca tccaagtacc cggtcacga caatttgcc gtgctgaaca 240
 tgcagggtggc cgcgttcgcc aagcgcacag cgcaggcgcg gaagcacgtc gcggtggcgg 300
 cccgcactat tccaccgcc caggcacagg cctcaggac ctgcgacacg atgtacatga 360
 acacgcagga cgccatcggc gcggcacagc gagccatcgc gttcaaggac ac 412

<210> 4882
 <211> 394
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-021-Q1-E1-B3

<400> 4882

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ttcgtcncac gctccgtctt tatttgtaat ctgaagctta caggaacatt tgagtggatc 120
atggacggat tggtaggcct cttgaaagtc cgggtggtga ggggcatcaa ccttgccctac 180
cgcgacgcaa gaggcagcga tccgtatgtc gtcctacgac ttggcaagaa gaaacttaag 240
acgagcgtga agaagagatc tgtgaacccc atctggcacg aggagctaac tctgaccgtc 300
acagatccca gcctagctct gaagctggag gtgttcgaca aggacacgtt cagcanggac 360
gacccgatgg gggacgcgga gatcgacgtg gcgc 394

<210> 4883

<211> 389

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-021-Q1-E1-B4

<400> 4883

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atgttcgtcc ccatccaagc cgttctcccc ccggatgcc aatgggcctta caaaaggtac 120
cttctccaat ccggaaaatg gtttaagcaa aacgttccca accaagaagg aatagccctt 180
ccccaagcca atcttcggcc ttgactgggc ggggccgaac tcaccgacta actaatgaag 240
attctgactg agcggggcta ctcttcanc aacaccgctg agccgggaaa tcgtgaggga 300
catgaaggag aagctcgctt acatcgccct ggactacgaa caggagatgg agaccgcca 360
gaccagctct tccgtggaga agagctacg 389

<210> 4884

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-B5

<400> 4884

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cgtggcgctc gccgaggagg ctccggctcc gggccccacc agcggctcct ccgccgtcgc 120

gcccgcgctc ggcgcgcgcc tcggggccgc cgtcgctctc ttcttcgctt actacattca 180

gtgagccggc cgcggccggt cgcccggagg ccgaggaaga gacgaagcgg gagagagagt 240

gacatggctg cgcgcattcc gatgcgtggg catgtttttg attcgacaca ctttttgtcc 300

tctttttctt tgttccctct ttctccttaa tttaacgaat tgatgcatgc cgctgatgtt 360

cttccccctg agagagggat taacac 386

<210> 4885

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-B6

<400> 4885

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ctgctacgag aggaggagga tatatactag tatatagcta gagcaattat tagctggctg 180

taagcatgaa tcgattggac atgatagaca acatcgacgg ccgtcgggta accaagaaca 240

aggcgcgcat ccaagttggc gactcctctt cgtcggacga aagcgacagg gagaaggagg 300

aagatgaaga agaagcacat gaggaagtgg ccaaggcgcc ccggttgggt tggaatcatc 360

acaatcacca cg 372

<210> 4886

<211> 381

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-021-Q1-E1-B7

<400> 4886

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tgaccaaggc aggtttgggc gtgctggcct tcaactcggg cctcgccatc tacaactcct 180
 ggggcgacgc gagctccgtc gcgttcgtgc tctccgcgga ctccatcctc gtgctgctct 240
 tctctgcct ccgtgagctg gagctgcagg ggcggccggg ggccgcgggc aggggcaggg 300
 atgtcgggat catcagagcc gcggtgtgga cgctgacgac gctgctctcg gccatgttcg 360
 cgtctanggt ggcgcgctg a 381

<210> 4887
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-B8

<400> 4887
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 ccgacctctt cggcgacaac cagggctacc gcgagctgtc ggagctcgcc gagcaggcgg 180
 ccaagcgcg cagagtgggc aggtcaggg agctgcacac gctcaaggga cacgtcgagt 240
 ccgtcgtcaa gctcaagggc ctcgacattg acaccattca gcagagctac accgtgtaaa 300
 ctcgactcag tttttttatt tgcttttttt tgcagacaaa taaaaaccac acacatatat 360
 atatttggt aagatcggtc gtattttcat tttcaccggg aagatttgta actgtcctcc 420
 tccctcc 427

<210> 4888
 <211> 446
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-B9

<400> 4888
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 tctacatgtt catgtcaagt ggaggatgcc aaaaatctgg aactacgatg ccctgtatcc 180
 gaaattctcc aaaatagaga atgtatacat tttcaatgat aagatcctag ccaaacattt 240

ctctttctct gtatagttct tgtcaaagtt tgaagagttt ggagttgaac ctaccttgtt 300
gagtggaagg ggattgtgtt cagaaaactt tagagatgct ttttagattg ccgggatgta 360
aattgttgcc agctggaagg ccttgacttt taacagtctc aaacaataac atttaagcat 420
ggattacctc ttgcatagta atttcc 446

<210> 4889
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-C10

<400> 4889

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ctccgcgtgc gccgtgaacg gcacgggtca cttcgggtata gcggtgctgc tgcccagagac 180
gccgccgcca gctcggccg tgagggccag gtggtggcg tggacgggtg gtgtcggcgc 240
cgggtgggtg ctgggagcca ggccttgac gctctctgtg gccggcgcgg tgagctggac 300
caggatgcgg cgaagggagg agatggatcg gcgggcgatg gccggggagg agctggggag 360
gatgacggtg cgcgggagca ggatgccatc ggcg 394

<210> 4890
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-C11

<400> 4890

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tccgcgcaaa caatgctagt tgccgccgcg gccggcgcca agcggcaggc gccggtgatg 120
ttcgtgttcg gcgactcgac gctggacgtc gggaacaaca acttctgtc gggggcggcc 180
gtccccaggg ccaacaagcc cactacggc gtcgacttcc ccggcggcca tcccaccgga 240
aggttcagca atggcgacaa cacggctgac ttcgtcgcga agagcatggg gttgaagagt 300
agccctccgc cgtatctgtc gcttgacccc aacggctcca gccctctgct cgcgcagact 360

gctctcacca ctggtgtcag ctacgcttcc gcagacgctg gcgtcctcga ctcaaccaac 420
gagggcaagt g 431

<210> 4891
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-C12

<400> 4891

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gtatcatctc accaggaaga gctaagcaac attacatatg agctcaacat catccatgaa 120
agaacaaaag caactaagat gcctatagag ctacaacaag caactgaagt tgtggaacaa 180
gcaaaagcta aggctttgat ggcccattat gaggtggcaa aagctagggg agatgcggat 240
caagttaagt cacaattaaa tgtcattaaa ttgagactag aagcggcatc aaggagata 300
cttgcagtga atgcatctaa agaaattgca accacctcag caaatgcatt gcaagaatac 360
aaagatgaag cacatataga gcccgaagat gagcagataa gaaataacta tatgac 416

<210> 4892
<211> 385
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-021-Q1-E1-C4

<400> 4892

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catcaagtcg cgatggagat gaagaaggtc gcctgcgccg tctcgcgcgc cgccgcctcc 180
gccaccgtgg tctcgcgcgc cgaggccccg gcgcccgcgc ccaccagcgc ctctcgggcc 240
gcgttccccg ccgtcggcgc cgtgctgggc gcctccgtgc tctccttctt cgcctactac 300
ctgcagtaaa attaaaggag gatcggaggg agaggctgct ggctgccatt gcctgtantc 360
ggttggaattc cgtttatata tatat 385

<210> 4893
 <211> 373
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-C5

<400> 4893

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ggaaggagaa atggcttccg cacacaacgc tctccgggtg tttttcatcc tagccgtggt 120
atgtgccgta tgcacagcga aaaggacagg agccaacaag gaagaatcgg cggcagcccc 180
cgggtggcgt gctggaggca gcggcgggac gttcgacatc tccaagctcg gcgcgaccag 240
cgacggcaag acggactgca caaaggcagt ccaggacgcg tggacgtcag cgtgcgaagc 300
gaccggaagc gccacggtgg tgatccccaa ggcgactac ctggtcggcc ctctcaactt 360
cactgggcca tgc 373
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<210> 4894
 <211> 372
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-C6

<400> 4894

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cctgccgcgc gcgcggcgcc ggtggcgggt gcgggagggg cgcgctcggg gccggcgggg 180
ccgctggaca tcgcgcagct gggcgccaag ggcgacggca agtcggacag caccctgatg 240
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atccgtctcg ac 372
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 <211> 142
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-C7

<400> 4895

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gagcgtcatc cggcagcaag tg 142

<210> 4896

<211> 296

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-C8

<400> 4896

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gccaagacac ggccggaacc aagaaggaca gcgcgcagct gcaggagcac ggcgccaccg 180
gcaccgtgga ccaggtggcc caggccggcg agggcgtggc gacaagcgtc agcgacaccg 240
cgtcgccgcg cgtcgggtggc gtcattgagca cgggtggtggg cgtggtcggc ggcgtc 296

<210> 4897

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-C9

<400> 4897

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cttcctccct ggcattgagg aagtagctgt ttgcctatg atcgttgccg ccgtagtgct 120
ggacaacaat ggcgccgacg cgtctcctg cactgccatc cctagcgtaa caataagcct 180
agaggagaaa gaaaatatca atggggatgt tcccacgac acctcggccg caagcaacga 240
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ggaatgcacc actcccgtct cctccagtag cccttcact cgcaagaagc gcggggcggt 360
cagcctcttc agggcgatgt tctgtcctt cggccggagc gacgacagca tgaagaagac 420

agacgacgac ac

432

<210> 4898

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-D1

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agcaagccca cccgttcgac gacatggccc gcctcgggcg cggcgccgtg ttggcgctcc 180
tagtggcggt cgcggcggtg gccgcgttcc tcgcggtgcc ggctcgggcg aagtccgggg 240
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gctcgggcgc ggtgggagag tgcgacgtgg acgaggcgga ggagctcggg ctgagcggcg 360
gcggcctcgg ctccgacgac gcggtgcggc ggac 394

<210> 4899

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-D10

<400> 4899

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tagagccgtt atttctaaag gaggacaggc gattgcgggt tcaagggatc acaaacctga 180
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gtatgttgtc gctgaccctg aaatcaagga ggaggtggtc gacagctccc ttgaattcct 360
catcctggct agtgatggac tctgggatgt tgtcactaat gaggaagctg ttgc 414

<210> 4900

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-D12

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caaggtggtg ctgcgcgcgg acgacgacct cgcgggcgcg gtggaacacg ccaggctcgc 240

cggatggaag ggtctgaagc tgttcctgga ctactccggc accaccgggc gcaggaaagc 300

ggtggccacc ccacgtggcg ccatggcggt gggcatgtcc agccgggacg cgtgggcggc 360

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<210> 4901

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-D2

<400> 4901

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cgtcaaggac accgcgggag ccgcggccga cagcgcgcag ctgcagcagc accgcgccac 180

cggcaccgtt gagcagggtg cgcatacggg ccacggcgtg gcggcaggcg tcaaggacac 240

ggtggcgggc gcggcggttg gcgtcaccaa cacggtggcg ggcgtggcg cgggcgtcac 300

gaacacggtg accggcgcgg tggcggggtg cacgaacacc gtgaccggcg cgggcgcggg 360

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<210> 4902

<211> 383

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-D3

<400> 4902

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cgggtgcccc gttcggcacc tgggacagcg gcgatgccgg gtacacggcc tacttcgaca 180
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accccgaccc cgaccgcgag cccgagccag aggaggggccc aatgaggaga gtccccccgc 300
cgtcgtcgtc gaggccggcg accgcaggag gccaccgcga gccgccgcgc ccggggcggc 360
gccacgggca gagccacggc gaa 383

<210> 4903
<211> 411
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-021-Q1-E1-D4
<400> 4903

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ttcggtcccc cttgtgccgg ccccgccgcg gccaaagccc cccggcgggg cttcaacaac 180
tgggttgcca ataaacaagc agagctacgc cctgtacgcg caaaaagtcc gtcggggacg 240
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tgggtgaccc cagcggcaag ggcgactaca ccaacatcac cgcggcgctg gaggatatcc 360
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<210> 4904
<211> 380
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-021-Q1-E1-D5
<400> 4904

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gagctgtcct attcttggtt ctctcgtcg cagcagaggt gggaaccatc gatgccaaaa 180

tgggagtagc catgcccacg catgccttga taatggagaa agcgaaacag caggagacgg 240
agaagaagga ggagaaaagc acggagaagg aagagagtca atgcttatcg ccgagtctcc 300
agttcgaggg cttctgcttc aacagcgaca gatgcgccga tgtgtgcatg aaggagagct 360
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<210> 4905

<211> 358

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-D7

<400> 4905

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cctggctctc ttctgcatcg tgcattggtga gaaggaagag tcaaagggca tcgatgcgaa 120
agcgtccggg cctgggtgggt ccttcgacat caccaagttg ggcgcctccg gcaatggcaa 180
gacagacagc acgaaggctg tgcaggaggc atgggcatcg gcgtgcggcg gcaactgggaa 240
gcagacaatc ctcatacca aggggtgactt ccttgctcga caactcaact tcacaggccc 300
ttgcaagggc gacgtgacca tccagggtga tggcaatctg ctggcgacca cggaccta 358

<210> 4906

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-D8

<400> 4906

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cgacattcac aggggggaca ggaaatcagc ggccatggcc tcgattccgg cgacgacctt 120
cgccgtcatc ttatccgtcc tcttctgtgc cgcggctggc accgcccgtc acaacgacct 180
ccccgactac gtcattccagg gccgcgtcta ttgcgacacc tgccgcgccg ggttcgtgac 240
caatgtcacc gattacatcg cgggcgcaa ggtgaggctg gattgcaagc acttcggcac 300
cggcaagctc gagcgtcca tcgacggggg gaccgacggg aacggcacgt acacgatcga 360
gtcaaagac agccacgagg aggcacatctg cgagggtggtc ttggtggaaa gcccgcgcaa 420

ggactgcgac ca

432

<210> 4907

<211> 365

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-D9

<400> 4907

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tcccgcgcgc gccgtctcta cggtcgctaa taagccgcgc catccaggga tggagatgaa 120

gaagatcgcc tgcgccgtcc tcgtcgccgc ctcggccacc gtggcgctgg tcgcggaggc 180

gccggctccg tctcccaaca ggggtcctc cgcggtcgca cccgccatcg tcggggccgc 240

cgtggcctcc atcttcgcgt actacattca ctgagccgcc ggacgacgag ccggagccgg 300

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cgcat 365

<210> 4908

<211> 349

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-E1

<400> 4908

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tggaggtgga gtcccccaag aaaggagcgg cgcgggtgcc agagcccatc gtcgttgctc 120

ccgcagtgga ggacgtggtg gcggacaagt tcgtggcggt ggtgaaggag gcgatcaaga 180

agccggagat ggacgagaag gaggtggcga tgcggagatt cctgggcagc cgggtgaaga 240

cagcgatgga gccgcggtca gagtcggagc agccgcggcg ccgggagggt gctcggagca 300

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<210> 4909

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-E10

<400> 4909

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ggcaagacgt accgcctccg cgtgtgcaac accgggatca aggcgtcgct caacttccgc 120
atccagggcc acgacatgaa gtcgtggag ctggagggt cacataccct gcaggacgtg 180
tacgactcgc tggacgtgca cgtcgccac tgcctctccg tgctggtcga cgccgaccag 240
gcgcccggcg actactacat ggtggcctcc acgcggttca tccacgacgc caagtccgcc 300
tccgcgtca tccgtacgc cggctccagc ggcgccccgc cggcgcccaa catgaccgag 360
ccaccggccg gctgggectg gtccatcaac caggccaggt cgttccgctg gaac 414

<210> 4910

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-E11

<400> 4910

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tctctctctt cctccgtcgc gtcgggtcgg cgtcgccatc gccggccatg ggttgcggtg 120
gctccaagga ggccgtggcc accggcaaca ccagcgccgg cagcaaggct ctcggagga 180
agccctcctc cgtctccacc ggcgcaagcc acacatccac cagctcgccg tcgtcctccg 240
gcgtcgtcgt caaggacgtc gtgaaggatg cggcggcggc cggcgagggt atgacgcccg 300
ccgacgccga gaagcctatc tctgtcgacc ccaaggcaga cgccatcgtg gtgatggacg 360
ccaagaaaga ggagggcaac aacaagggtg ccgtggagga ggatctgc 408

<210> 4911

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-E12

<400> 4911

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ggcgtcgaag tgttccgcct gctgtggcgc accgcgttcg tcgcgctcat caccctgtgc 120
gccgtcctgc tgcccttctt caacagcatt ctgggaatcc tcggcagcat cggcttctgg 180
ccgctcaccg tcttcttccc cgtcgagatg tacatccgcc agcagcagat cccgcgggtc 240
agcgccacgt ggctggcgct gcaggccctc agcatcttct gcttcgtcat caccgtcgcg 300
gccggggctg cctcgggtaca gggcgtgcgc gactcgctca aaacctacgt gcccttccag 360
accaggtcgt gatgagcact gcacgtacgg tcccatatgt agtcaaaaa cttaa 415

<210> 4912

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-E3

<400> 4912

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gcacgcgctg gcgctgttcg tgggcgtgtc cgtcgcggcg aacatctcgg gcggccacct 180
gaacccggcc gtgacgttcg ggctggccgt gggcggccac atcaccatcc tgacgggcgt 240
cttctactgg gtggcccagc tgctgggcgc caccgtggcg tgctgtctcc tcgggttcgt 300
caccacggc aagcccatcc cgacgcacgc cgtcgcgggc atcagcgagc tggagggcgt 360
cgtgttcgag gtggtcatca ccttcgcgct cgtctacacc gtgtacgcca acgcgccgaa 420
ccaagaag 429

<210> 4913

<211> 351

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-E5

<400> 4913

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caagtgaat gattgttggg cactactact tcccccttaa ttcttgatcc cgccggacag 120
aatgcagagg cagctgagcg tctcctcgat gcccaagctc ctgccggagg aagccgcctt 180

cgcgccggcgc gacgacgacg tcgaggccaa gcccgagaag gcgcgggccc cgcgcccgctc 240
 ggggaaggag cggtcgggtgc acctcgtacc gctcatcgctc gtgctctgct tcctgctcct 300
 cttcctctgc tcccacgccc cctctccctc tgacatgtcc agttttggga a 351

<210> 4914

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-E6

<400> 4914

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 cgtgtcctgg aggtcacctt ggtgtcggca aatgacctca agaaagtgtc gctcttctcc 180
 cggactcgca tctacgccgt ggcttccatc tccggattcg acctccgcat cccttcccac 240
 agcacccaag cagaccacag caacggctgc aacctctgct ggaacgccgt ggtacacttc 300
 cccatcccgg ctgccgctga caccgcggc ctcgcactcc acgtgaggct ccgcgcccag 360
 cgtctatacc tgggcgatcg cgacatcggc gaagtggttt gtgccatcca cgacctcctg 420
 gccggggccg acaaggggtg 439

<210> 4915

<211> 363

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-E7

<400> 4915

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 ggcgcaagtc tggagatagg gctgataaag ctaattacta ctacaataat gatggagaga 120
 agagcaatgt tccttcatta aagaaccttc ctccaattgt tcatcatgaa acattcttca 180
 gcaatgttca gaatgactac aatcaaacag gattagtgcc tttggaggga tgttctgcca 240
 gtgaggcttc acagcttctc agtgatcgct ggactgctgc aatcaacatg tacaatgacc 300
 aaacaattga cccctcagag aaaccggtta tgtattctgg atctagcagc tcatcatggg 360

gtc

363

<210> 4916
<211> 437
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-021-Q1-E1-E8

<400> 4916

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gtgcggaact gcgtgctcaa gaacaccacc aacggcgtgc gcatcaagtc gtacgtggac 120
gccgagtcgg tgctgacggc ctcccatctc accttcgaga acatcaggat ggaggaggtg 180
gccaaaccca tcgtcatcga ccagtacttc tgcccgcaga aggtatgccc tggcaagcgg 240
agcaactcct cgcattgtctc cgtcaaggac gtcacgttcc gcaacatcac cggcacgtcg 300
tccacgcccg aggccatcag cctgctctgc tcggagacgc agccatgcag cggcgtctcc 360
ctcatcgatg tcaacgtgga gtacgccggc aagaacaaca naaccatggc cgtctgcagc 420
aacgccaagg ggcacgc 437

<210> 4917
<211> 362
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-F1

<400> 4917

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tggtccttcg tggagcggcc cggcgcgctg ctggtgatcg ccttcctggc ggcgcagctg 180
gtggcgacgt gcatcgccgt gtacgccaac tgggagttct gcaagatgca gggcatcggc 240
tggggctggg gcggcgccat ctgggcgttc agcgtcgtca cctacttccc gctggacgtg 300
ctcaagttcg ccatccgcta cgcgtctctc ggcaaggcct ggaacaacat caacaacaag 360
ac 362

<210> 4918
 <211> 428
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-D7

<400> 4918

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agaggggtgct tcgcacgtgc atgtgagatc gggcgatccc gatcgtcggc cggcgcgaa  180
tgaactaacg acgacgtacg tgcgaccggg ccggggcggtg gattattccg gcctgagcaa  240
tgggcaagat cgagtacggc gtgggtggcg gcggcgcggt ggtgctggcg gagcactacg  300
gcgcggcgggc ggcggggcggc aacgcggggc ccggtggcgcc gcaggtcctg gagcgtctcc  360
ctggcgggcgg cgacgacgac tgcaacgtgt cgtacacgca ggacctccac gtgttccacg  420
tcaagcgc                                           428
  
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<210> 4919
 <211> 363
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-D9

<400> 4919

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cgcagagatg gcggttctcg tgcaggaaat gctgcatcca gatctctcat ttgtgcatca  180
gacaattagc ccagttgacc atgatcccaa attagtagag gctgaggttg cccctgggcc  240
tgagagaaacc ctcgcttcag gtaccctggg cactccatgg agacgctcac gtcacaagct  300
tgatggcaaa gtcacaactc tagcttttgc gaatttcagt gaagagctta tgggtgctcaa  360
ctc                                           363
  
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<210> 4920
 <211> 354
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-E1

<400> 4920

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tagccctcgc gctagtggcg gccaccgccc cacaggtagc ggaggcaaag aagaagagag 180
cggcgagagag cggcgaggcg gcggaggcga agaagatcca ggacgacttc tgctcgacgc 240
tgtgagaggg caagaagggg acggacctgg tcgtgtgcaa ggagtcctgc gcgctctccc 300
agcagtccaa cctggtgctg tacggcagga tccagtgcaa gggcaagtgc accg 354

<210> 4921

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-E10

<400> 4921

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atgacgaagc cattgatccg gctgctgctc cctgcctgca gcaacacggc cacctccgag 120
cgtctctcac ccaagtcctt gcactcgcct ctctgacga gcatgcaggg ctcgacatc 180
gagacggggg cggcacagat tgtgaggccg tccagcctcc ggatgctcct aagcaagcca 240
accacacggg tgcactacta ctggcgcaag ttcgacgacg cgctcatgog gcccatgttt 300
gggggccgcg gggtcgtgcc cttctcccct ggatcgccca ctgagcagag cgtccacgac 360
ggacggtgaa caaagccgcg tctgacacca agag 394

<210> 4922

<211> 321

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-E12

<400> 4922

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ccagtgtca cggttgcgtt gcatttgcac ggctgcgcgc tgcgctctgg gagcttgcac 120

tagcggggtcg gcggcctatg cgcggggcat ctttcgagtg cgtgcgtgtc tgttcaagct 180
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<210> 4923
 <211> 412
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-027-Q1-E1-E8
 <400> 4923

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 ctccgcttgc gaggtggtat gcagatcttt gtgaagacct tgactggcaa gaccataaacc 180
 ctggagggtt agagctccga caccatcgac aacgtgaagg cgaagatcca ggacaaagag 240
 ggcaccccc cagaccagca gcgtctgac ttcgctggca agcagctgga ggatggccgc 300
 accctagcag actacaacat ccagaaggag agcactctcc acctggtgct ccgcctccgc 360
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<210> 4924
 <211> 126
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-027-Q1-E1-F1
 <400> 4924

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 aggagc 126

<210> 4925
 <211> 410
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-F2

<400> 4925

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tgtatgccgt atgcgtgtgt gagcttgccg aaattggaca tctaggccgt gcgtaccctg 180
cgatgaaagg cgccgtcatc ggcgcacga ccgtcctggg cgtggcgggt gtggccacca 240
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ccacgtcggg gaagtccatc aagtccttct gccagcccggt ggactacagg gagacgtgcg 360
agaaggcgct ggacgctgca gccgggaacg ccaccagccc cacggagctg 410

<210> 4926

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-F3

<400> 4926

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catcgtgtc gaccgcaacg gcagtgtgaa gaatgcttcc gtcgctaggg ccaacttgac 120
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caagaggccg tatctcgaga ggaactactc cgtgctggaa ccttcagaag ggagccagct 360
cgccgacgac gtggaagggg aaagctctct cgagaacgtg aagaaacagc tcgagctcaa 420
c 421

<210> 4927

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-F4

<400> 4927

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cgcgcggtcac agctgcgggtg ctctttctaca tctcgcggtg tgctgccctc agcgcggtcg 120

aggccccggc agagtcaccg aaggaaggca gtgctgccaa ggcacctgag tctgccaaga 180

gaactgctgc ccccgctgaa gcacccgaag ccgcattcac ccccgctgcc gccgctgcc 240

catcgccgtc gtctagggag tctgggtccag ctaccgcgcc agccaacggc tccacacccc 300

cttcttccac ggacgaagag ttgagccctt ccccgccagc atccaacgcc gcggcggtccc 360

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<210> 4928

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-F5

<400> 4928

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ttgcactagc gggtcggcgg cctagggcgc gggcatcttt cgagtgcgtg cgtgtctggt 180

caagctctga tctctctctc ggccattcg ccggaggaaa ctgaccgccg ccttctcgt 240

ctcgtctctt accctattcc cggggctgag aggggaggag agaaggccac gtccacacca 300

taaagcagga cgtacagaca cgtgtacgag ggggatcacg gtcgggtgag gtgactaagc 360

tggcggacgg aacgacgacg attgcg 386

<210> 4929

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-F6

<400> 4929

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cgctcgctgtg ctccgcgcgg ccgtgctcgc cgccgtcctc ggcttcgtcg ccgctgccgg 180
gttcatctca aacgacgcgc tgctggagcg cgggcacgac accaccggcc ggagcctgct 240
gcaggccaag aaagattgcc cggtagctt cgagggcgcc aactacacgg tgatcacgag 300
ccggtgtaag ggcccgtgt accagccgac gctgtgctgc ggcgcgctca aagacttcgc 360
gtgcccttac tccacctaca tcaacgacgt gagcaccaac tgcgccgcca catgttcage 420
tacatcaacc tctac 435

<210> 4930
<211> 395
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-F7

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agtcgtggct ctctccacg ctggcgcca cctccacctg cgaggacgcc tgcaaggacc 180
tgccaagac cagcgacaag gacgacgtcg tcaacttcag cctcgacttc gagaagctgc 240
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tgccaccctc caacgccgga gcgcctcct acggcgcggc ggcgcccttc gggggctccg 360
ccgatggccc cgccggcgcc tccgagggcc ctgcy 395

<210> 4931
<211> 360
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-G11

<400> 4931
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ggcgtccgag ctcttggtg cggcgccggc cgccgcgaac gcgccggcg gggcggttcag 180
caactgggtg gcgatgaacc agcagagcta cgcgtgtac gcgcagaagt ccgtcgggga 240

cgggggcaag gagcccctgg acaagaagct gtcggaggcg gagaagaaga aggtcacgta 300
cgtggtggac cccagcggca agggcgacta caccaacatc accgcggcgc tggaggatat 360

<210> 4932
<211> 398
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-G2

<400> 4932

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gctggtcgcc gtgctagcgg tggccgcccga tgcgccaac gccggccacg ccaagcccct 120
aacgcctggc gggcgcgtgg tacacgacaa ccacggcaag ttcacggccg ggccgtggaa 180
acccgcccac gcaaccttct acggcggggc tgacgggtcc ggcaccacgg cgggcgcgtg 240
cgggtacaag gacacgcgca cgcaggggta cggcgtgcag acggtggccg tgagcactgt 300
gctgttcggg gacggcgcgg cctgcggagg gtgctacgag gtgcgggtgcg tggacagccc 360
tagcgggtgc aagcccgcgc cggcagcgct ggtggtga 398

<210> 4933
<211> 167
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-G3

<400> 4933

atagtgagtc gtattaaaaa ccaagcctca gctgttgctg ctgccatcag ccgtgtcatc 60
agtggcagcc gctagagcaa ctgccggtca ttcgactcca ctgccgacat gcaggcgagt 120
ggtatactac aagcagtcga atatctacag gttgaacttg caagtgc 167

<210> 4934
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-G5

<400> 4934

gcgggtcgac ccacgcgtcc aggagtcgca gggcgtgccc accaagcagg cggaggcgat 60
cacctccgcc atcacggagg tcctcaacga cagcctcgag agcatctccg agtccttcgt 120
ctccaaggcc gagatgcaga agagtgcgat gctgcaggag tccaatatct ccaagttcaa 180
gtcccaagtg cagagctcgc aggaaaacca tttctcttta ctacagcggg agactgagaa 240
acttcgcgga gatattgata agatgaggag tgaactgaag tatgagatcg acaaggtcac 300
cgcaggacag cgattggatc tgaatcttga aagagggcgc atacgtgatg agcttgccaa 360
gcagaatgag gaaaccactg agcttaccac aaagcttggc aagggaatcc actcact 417

<210> 4935

<211> 345

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-027-Q1-E1-G6

<400> 4935

ttactacacc ctatagtgcg tcgtattaaa ancgcggtcc ctctaggcgc ggcgggagtt 60
catgcggcgc ggcggcggcg ggcgggaggg cgacgccagc tatcgcaagt cgggtggtggg 120
ggtgcggagg cgtggtcacg gcatcgaggt gttcttgag gaagcagcat catcagcccg 180
acgacgcccg ctgcggcagc agcgacgacc actaccagca cgacgtgatc atgctgagga 240
caacgaagag cgggcggggc tccccgccgc cgatatccgt gatctgcaag ggcggggcggg 300
cgtggctctg cctgctggcg caccgcgagg gtggacgcct cgtgc 345

<210> 4936

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-G7

<400> 4936

cgggtcgacc cagcgtctca ccgctctctc ttcctctgct cttctctgcc tgctgagct 60
caccgcacct cgctctctca ccgcgtttcc tccgttaatc cggtagaaaa tggccgatgc 120
cgaggatata cagccccctc tctgcgacaa cggaactggc atggtcaagg ctgggttcgc 180
tggcgacgac gccccgaggg ccgtcttccc cagcatcgtg gggcgccgc gccacactgg 240

tgtcatggtc gggatggggc agaaggacgc ctacgtcggc gacgaagcgc agtccaagag 300
 gggatatcctg accctcaagt accccatcga gcacgggacg gtcagcaact gggacgacat 360
 ggagaagatc tggcatcaca ccttctacaa cgagctccgc gtggtcccc aagagcacc 420
 gttctcctc 429

<210> 4937

<211> 325

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-H1

<400> 4937

ttcgcggggtc gacccacgcg tccatttttt ttctgaccac aaatcaacat taacattatg 60
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 tctaataata attacatcgg ttggttttgt gatgatccaa agaagaaaga aaatacaaac 180
 cagcggatta tatattcggg ggagacttga gagtacgtga gaaagagaga ggttacgaag 240
 agtgattata tatataatat atgcatgtta gtcaattggg tcagatgcag gcgagctcct 300
 ttgccaagcc gatggacttg ccgac 325

<210> 4938

<211> 357

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-H12

<400> 4938

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 aatatgggtc agattgtgaa cctagtagat gtccatgact tcgttcctga cagcgtggaa 120
 agtgatatctg agctgatggc ccctccctcc ccggactcca gctacggttt ccatgttccc 180
 ggcgagaagg agttctccaa ggagcctcct cagctgccgt cccagctcta tctcggcgtg 240
 ctgaattccc ggagcaccga agaaggctgc gcgaggccga ggcacgtcgt cctcgaccat 300
 ctctacatcg agaagggctg gggcgcacag ccgctgggtg ccctcggcta caccac 357

<210> 4939
 <211> 441
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-H2

<400> 4939

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gggtcggccc acgcgtccag ccgagttcga cgcgttccag gacacgctgt acgtgcacgc   60
gcggcggcag ttcttccgca actgcgtggt ctccggcacc atcgacttca tcttcggcaa  120
ctcggcggcg gtgttccaga actgcctcat catcacgcgg cggcccatgg acaaccagca  180
gaactcgggtg acggcgcacg ggcgccacca cccaacatg aagtcggggc tcgtcatcca  240
gaactgccgc ctggtgcccc accagaagct gttcccgac cgcttcaaga tcccctcgta  300
cctgggccgc ccctggaagg agttctcgcg cctcgtcata atggagagca ccatcgccga  360
cttcgtcaag ccagaggggt acatgccctg gaacggcgac ttcgccctca agacgtctta  420
ctacgccgag tacaacaacc g                                     441
  
```

<210> 4940
 <211> 438
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-H3

<400> 4940

```

ggtcgaccca cgagtccgga aataattggg aataaatagt tcgtgaatcc ctgaagcgtg   60
catatatata ttcttgccaa gataaaggta atggagtcgt cacgcagggt ccagccggcc  120
gtcatcctgc ttctcctgct catttgtgtc accgatatgg cacaggcaag ggaatgcgag  180
aagtacagtg agcgatttgt tggggcatgc atgatcgag acaactgcgc caatgtgtgc  240
cgcggtgagg gcttcttggc cggcagggtgc agcaccttcc gccgccgctg catctgcact  300
aggcagtgtc aaacaagatc gctcgatcgc ttgccatgca tcgacaacct attcttaata  360
acgttcatta tctcgttctt atttatgacg aatgtcatgt atgttctggt gactgtcatg  420
tatattctga tgactgtc                                     438
  
```

<210> 4941
 <211> 442

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-027-Q1-E1-H4
 <400> 4941

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gtcgaccac gcgccacag tattcttcac tcatgagtca gggcatcagc aagttaactt 60
cctgaattac tagataatat ggaatcgaat caaaccaagt actagctccc ttgttccatc 120
ctctgcatgg ctccgatcta gtaaatagca tataaccccc atagaagaaa agaaataagt 180
aagctcagac agtgactgga ccgcacagaa tcatatttca tcagctcttt tttcttgaaa 240
ttttattggg tattttaccta ttgctatca tatattcata atccctatcc cctagccttt 300
tatttcattt ttcttggtac agtgggtcatg tgccccatgc acatattctt tgaaatgcac 360
tacatgtctt ttcccatgca caaggataaa tagtctatct cctttcggag tgtaagattc 420
atcatgaaaa gcactttctca ta 442
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<210> 4942
 <211> 397
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-027-Q1-E1-H5
 <400> 4942

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cggtccagna atcccgggtc gaccacgcg tccggcagtc atctcctcca ccaccaccac 60
caagctcaac aacagccagc tcgcgaaaat aatgaagagc cgcagcatgg catcatcggc 120
cgcgctcttg gtgctagccc tcgcgctagt ggcggccacc gcccacagg tagcggaggc 180
aaagaagaag agagcggcgg agagcggcga ggcggcggag gcgaagaaga tccaggacga 240
cttctgctcg acgctgtgcg agggcaagaa ggggacggac ctggctcgtgt gcaaggagtc 300
ctgcgcgctc tcccagcagt ccaacctggt gctgtacggc aggatccagt gcaagggcaa 360
gtgcaccgag cagaagggca tcacggcgcc ggccatg 397
```

<210> 4943
 <211> 390
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-H7

<400> 4943

tacaagactc taaaatgagt cgtattaact agaacacaaa ctgaacagag tgggtgagtcc 60
tacgtacgta cgtgtaacaa ctagcaccgg tcgatcgata caatattctt caacctgaca 120
cgtgggggtct gcactaccgg cgacggacga ggggtgagctc gtcattattct caaatctcca 180
atatattaata tacgtgtgtg cgataatgta tttatttgta atttcgcgat tgtgtaatac 240
ttggggggatt tgctatgttt cggtcgcctc taaaatacac tatattttta gacaacgatac 300
tttatcgtaa attagttcat gagcatgtaa agctaagatt cattttaacg caggaaaaaa 360
aaacaagaac gaatggatac attgtctctt 390

<210> 4944

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-H8

<400> 4944

gggtcgaccc acgcgtccat gcaacgacgc ctaagacgct tgaggggaaa gccccagctg 60
aggccaccat ctccacaccc aaggttgcac ctgagaccac taccatccac attgaggttg 120
cggcaaaaaca tgcagtagtt gagaaggtgg aggaggacaa ggaggaggca ctaacagtgg 180
cggcgaaaca agagccagca gccaccattg agcctcagca gattgctagt gaggtgacca 240
cttcggaagt ggcggtcgctc gttgtcgagc ctgagaacaa agaggaggag gaagttgtgg 300
agaagaccgt catcgagaag gagaagccat cagcagtcca tgcagaggaa aatattgcca 360
ccaacaaggt ggcagccgag cccacgacag aattgaagaa agacaccgag gaggagatat 420
aga 423

<210> 4945

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-027-Q1-E1-H9

<400> 4945

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 tgccgctgag gagacgacga cgactccttc gtcaggcggc ggggggttacg gcggtgcaac 120
 cggcaaggct tcctcaggcg gcggcgggct ggaccccgac ggcgaccag aggttgggct 180
 gaacgggaag gcgatcgagg agatcgtgaa cgagcacaac gtgttccgcg ccaaggagca 240
 cgtgcctccg ctggtgtgga acgcgacgct ggccaggttc tcgcagcagt acgcggagac 300
 gctcaagggc aactgccagc agatccactc gtcgtcgccg tacggggaga acctgatgga 360
 gggcaccccg ggggctgacc t 381

<210> 4946
 <211> 363
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-A10

<400> 4946

attcacgggt cgaccacgc gtccgctcaa gctggctgga tgacagcatg gccccacaac 60
 gctacgggca gggcagacaa tccgcatcga tccccaccgc aaattgcccc tatctatccc 120
 tccctacaaa tcgaaacaaa gaaagataaa atcgagagga cgccagggcc gattctctgc 180
 gtgacttggg gcgtcgtcgc cgagttttct ccggccgagg gcggcgcgac cggacaacca 240
 gcgtgagcgc gaccggcgac atgactcgcg gcaaccagcg tgaccgcgac cgtgagcgcg 300
 cggcggcgcg gaagcccaac gccagaact ccaggacgg gtcaccccg gagcagcgcc 360
 gcg 363

<210> 4947
 <211> 389
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-A12

<400> 4947

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 tcagcaatgt cgcagtgaag gcggcgggcg tggccgcgct gcttgtggtc gcagtgggtg 120
 cgctgcccgc gcgcgcggcg gcggtggcgg tggcgggagg ggcgcgctcg gttccggcgg 180

gtccgctgga catcgcgag ctgggcgcca agggcgacgg caagtcggac agcaccgccga 240
 tgatcctcaa ggcgtggaag aacgcgtgcg agggcgacggg ggtacagaag atcgatcatcc 300
 cgccgggcaa ctacctgacg ggcgggctgg agctgaaggg cccctgcaag tcctccatca 360
 tcatccgtct cgacggcaac ctgctcggc 389

<210> 4948
 <211> 384
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-028-Q1-E1-A2
 <400> 4948

ggtccagaat taccgggtcg agcacgctc cggaacgtcg tacgagaacc tttctccctc 60
 ctccaccttt ctcttttct tgccaaggca aaacaccttc gccggcgaga gcatggcgat 120
 ggcgtaccgt gtcttgagg tcacctggt gtcagcaaat gacctcaaga aagtgtcgct 180
 cttctcccg actcgatct acgcctggc ttcatctcc ggattcgacc tccgcatccc 240
 tttccacagc acccaagcag accacagcaa cggctgcaac cctgctgga acgcctgggt 300
 acatttccc atcccggtg ccgtgacac ccgcggcctc gactccacg tgaggctccg 360
 cgcccagcgt ctatacctgg gcga 384

<210> 4949
 <211> 398
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-028-Q1-E1-A4
 <400> 4949

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 aggtctgata ggcaacccaa taatggcaga agtcctatca ggatctcatg aacaccgtct 120
 aagctctgcc ttagatggac actacgacga gaagaggaaa tccaatgtgg aatacacaga 180
 ggacgagaag aaagccgtga tcgcggtct gaaaaagaag gctttgagcg cctcacagaa 240
 gtttaggcatt tccatgaaga gggggaggaa gagcagcaag gtgatgtcca tctcgattct 300
 ggatgagcgt gaacctgagg aggtgcaggc tgtggatgcc ttccgccagc ttcttgact 360

tgaagagctg ctaccatcgc agcatgatga ctaccaca

398

<210> 4950

<211> 322

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-A5

<400> 4950

gggtgctattg atctctacga ctgcgacagc gactgctacg acagtccagt cgccggcaggc 60
gggggtcacc tctcgccaaa caggctctgg attccgggcg tggcggaggg atttgctgag 120
gccggacagg acggccggcg aagcttgggc gccgccggcg cccaaggcca acaggaacgt 180
cccaagacgg cgcttcggtc gtcgttgact caccagatg cagtcgcacc cgcccaatcg 240
ccatcgtgtc atgacagatc gatcagaaga tagctagcag ttcccatctc actgggtgtgt 300
gttaatttag cttccgttaa cg 322

<210> 4951

<211> 350

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-A6

<400> 4951

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ccggtcgtcg atcgaggaac caagctgctg ctgctgctac cggacgacac caaccatgat 120
acggaggacg acggtgtgcc taggcctgct gcttctacta ctggcggcgt cgactgcgac 180
ggcacatttc tcgatcggcg acgtggacga gtacttgaac aggcgcacgc aggagtcccg 240
ccacaggaac caccggcgcg cgcagatcaa tgacctcatc tccagtgtg cgcgcttcca 300
cgccaacgtg gatgcacgcg cgtatggctg ccgctccaac ctgcagctgc 350

<210> 4952

<211> 337

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-A7

<400> 4952

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ggcagtgggt gtcctatggca acggggcgga cgccgaccaa cattgcggtg atcaagtact 120
gggggaagcg ggacgaggcg ctcatcctcc ccatcaacga cagcatcagc gtaacgctcg 180
acgccgacca tctctccgcc accaccactg tcgcgctcag cccctcattc ccttccgacc 240
gcatgtggct caatggcaag gagatctcgc tattacgagg aaggtttcag agctgcctca 300
gagaaatcag aaagcgtgct cgtgactttg acgacaa 337

<210> 4953

<211> 328

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-A8

<400> 4953

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gaataataat tgatatatga taaaaaaaga tataagctct aacttaaata aatatataat 120
gctaaaagag gaaatcaaga tgtacaatac ataaaggata aaaggggggg ccgtcttaac 180
ggttttggcc ttttattgct ttgagcgct catagaagtt tttgcattgg atcatcaagg 240
tgtagtttat gtggattggt ttttacatct tcattctggg aaaaccttgg ttttatgcag 300
ttttaggcgt ttttgtcaaa cgcccttt 328

<210> 4954

<211> 358

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-B1

<400> 4954

cgggtcgacc cagcgcgtccg tcgggcagcc cgcagacgga gggtaggacg ccaccgactt 60
cagcgtgctg ctgcatgggg tgaacacag ctggcgcaact cgcattgcgg tggacaacgg 120
gttcatcggg tccaaggacc acctcgcgct ccagctggtc gtggaggtca ccgtgcatgt 180
gcacgtcatc gcgctcggag ttcgggcaga cgacgtatc cgtggactgc tggatcaccg 240

gcgatcggct gagcaacgac gtgcacattg cgtcgcacag ttgcaggagc agcttctcgg 300
aacgacgacg gtccagagcg cctgtggtct ggaactctgg atcgtggggg aatggcaa 358

<210> 4955
<211> 388
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-B10

<400> 4955

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ggctgcttcc acaaacaaca ctctcagggg gctgttcacc ctacatggtt gttatgcgcc 120
gcagtatgca cagctaacat gactgtatca aaagcaggag acttgtcgcc agcccctgct 180
ccgttacgat caggaggcgc caccgcagcc caaaaaagtg cggctacagc caacaagacg 240
ttcgacatat cgaagtctcg ctcgaccacc gacggcaaga catgactcga cacaggcagt 300
ccaggacacg tggacgtcag cgtgcgggacc gatgggagac gcaaccatgc tcatcccca 360
tggcgactac ctgctgggcc ctctctac 388

<210> 4956
<211> 388
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-B11

<400> 4956

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gattccgagc gcgacgcctt ctcgattccg acggcgacgg gctgccctgc gccgctgcgc 120
gccgtgccag agacgggtcg ggtcagggtc agggtcaggg tcaggccgctc agtcgccgcc 180
ctgtactgcg gccgggacgt gtgtcggggg gcgattcgtg ccgcccgctc gtgctcggcc 240
ccgcggttca cgccagcgat tgcgggtgtg cttccccaaa ttccagaaca gcgtcgtttg 300
ctcgtttcga atggagagat cgatctcact ctactcact gtcttcgcgc ctaaacaatc 360
gtccgtgcgg ccatcattcc tattattt 388

<210> 4957

<211> 387
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-B12

<400> 4957

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gggtcgaccc acgctgtctac gcgtgtcgt acaacgacgc cggcgcgggc gacggcgggc 60
gacccatcgt gcacggcacc atccaggcgt acctccgcga cgcgcgggac cggctggagg 120
ccatggtgct tggcgcgagg cgggagcgcg tgcggctggg gctcaaggtc gtgcgcggtg 180
cgtacctgac ccgcgaggcc cggctcgcga ccgcgctcgg cgtgccgtcg cccgtgcacg 240
gcagcatcca ggagaccac gactgctaca acggctgcgc cgccttcctc ctcgaccgcg 300
tgcgccgcgg gtccgcctcc gtcattgctc ccacccacaa cgtggagtca ggccaactcg 360
cggcgggcgcg tgcccaggag ctgggga 387

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<210> 4958
 <211> 409
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-028-Q1-E1-B2

<400> 4958

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tgacgggtcca gaataacggg tcgaccacgc gtccgggtcgt cgacgggtgca gctcgatccg 60
cctcgtcgag catgtcgagg agggtcctt gcaaattctt catgcatgga gcttgcttca 120
aaggagatta ctgtgaattc tcncatgact gcaatgatca accagataat gtttgcaactt 180
tctaccagaa agggacgtgc acctttggta gccgttgtag aatgaacat gttgaagttc 240
attgtaactg cccccaacca gcaaccactg tagcgcgtgc atcctccaat tcttctcage 300
tagttgcttc ttccagagat cccattgca gcgaatgcc aacggattta tgtgacaaa 360
cacagcagat ttgcaagtca acagcagcac tttctgcaca tcaaactgc 409

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<210> 4959
 <211> 333
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-B3

<400> 4959

ggtcgacgca cgcgtctacc cacacgtctg ccaacgcgtc cgcctctgtc tcaccctccc 60

tcgctcagac aaataataat gaacgggtccc gcccttttcc tccgacatcc acaacggggg 120

aggggaaaac acgtacattc atccggcggc aataatggcc tcggttccgg ctccggcgac 180

gacgaccgcc gccgtcatcc tatgcctatg cgtcgtcctc tcccgtgccg cggctgacca 240

cccgaaactc cccgactacg tcatccacgg ccgcgtgtac tgcgacacct gccgcgccgg 300

gtttgtgaac aacgtcaccg agtacatcgc ggg 333

<210> 4960

<211> 353

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-B4

<400> 4960

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tggatcccct gtctgtccc tgttaatcgc gcgcgcttgc ctatttaca ggcgaaacaa 120

gcgcgcagca gtggccatgt cgtccgacgc ggtggccgcc agcagcagga agggccggct 180

gaagcagcgc tacgacaacg agttccgcct cgtcgcaggg tcggtgccgt accgggtgaa 240

caagaaagac gacgagggcg gcaaccctg cagcagcctc ggcgacgaca cggcggcgga 300

ggtggaggtg ctcatgatct ccacgcctaa ccgggccgac atggtcttcc cca 353

<210> 4961

<211> 383

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-B5

<400> 4961

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gaaccgcgtc gtgtcgtcca tgttcaacac cgttgccggc aagaagatcg ccgtcctcgg 120

cttcgccttc aagaaggaca ccggcgacac caggagacc ccggccatcg atgtctgcaa 180

gggcctgctg ggtgacaagg ccagatcag catctacgac cccaggtga cggaggacca 240

gatccagcgg gacctagcca tgaacaagtt cgactgggac caccgatgc acctgcagcc 300
gacgagcccg acggccgtga agcacgtgag ctgcgtgtgg gacgcgtacg aggccaccaa 360
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<210> 4962
<211> 354
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-028-Q1-E1-B6
<400> 4962

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acgtcgcgcg ggtcgcagca gtaccgcgcg ctgacgggtgc cggagctgac gcagcagatg 180
tgggatgcca agaatatgat gtgcgcggcg gaccgcggc acgggcggta cctgacggcg 240
tccgccatgt tccggggcaa gatgagcacc aaggaggtgg acgagcagat gatcaacgtg 300
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<210> 4963
<211> 284
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-028-Q1-E1-B7
<400> 4963

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gctgacgtcg cgcgggtcgc agcactaccg ctgctgact gtgccggagc tgaggcaaca 180
gatgtgggat ggcaaaaata tgatgtgcgc agctgaccgc cagcacaggc ggtatctgac 240
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<210> 4964
<211> 353
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-B8

<400> 4964

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cctcacggcc gacggcgtca cctaccataa gacatgcttc aagtgcagcc actgcaaagg 180
gatcctctcg atgtgcagct actcttccat ggacgggtgtg ctgtactgca agacccactt 240
cgagcagctc ttcaaggaga ccgggagctt ctccaagaac ttcacgccag gtggcaagtc 300
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<210> 4965

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-B9

<400> 4965

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ttcctcctaa tgcccagctt tattgcagat ccagccctct gatcctcgtc ttctttcctc 180
tctccaacat gaaggtcaac accaagatca agctggagcc ggtcatggcg ccatcgctgt 240
cactgccgcg gagcgccagc gagctacccg acccgccgtc accgttcagc tccaacacgg 300
tgcaccaccc cgtctccgtg cccaccacac ctaagttgtc cttatcgtgc tcgtcggttcg 360
gcca 364

<210> 4966

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-C1

<400> 4966

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ctgctcgacg cctggcctaa cgagctgccc gcggtcgctt aagtcacccg agtttggttt 180
 tttgcaggat tcttaaaagt tggaccgtcc tgctagtact ccatgtgtcg tgttttcaca 240
 ttggaggacg tctgtatatg taagaaaatc ctctggcgct tgtgctcagc ttgatgaaat 300
 atccttgtag ggttgggtacc tggacccgct agagctggct ggttcgtcaa attgtgttc 359

<210> 4967
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-C10

<400> 4967

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 tctagccctt ggcttctcat ggcttagata aagactccaa ctttaaccaa agcttcagga 180
 gtaagctagt gaaggaatat ctcaaatttt ttcagcactt cgactaacat tctatgcgaa 240
 ggaaagcata tcccagcttt catgaaactt cggaaaacca ctactccgat ccatctgact 300
 cgggaagaag aacagtgtc tctcctcgg ctctcactat ggatatatca tgaaaatatt 360
 ttcccttcat tgtctcaatt tgccttttct tg 392

<210> 4968
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-C11

<400> 4968

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 cgcgcgcggc ggcggtggcg gtggcgggag ggcgcgcgtc ggtgccggcg ggtccgctgg 180
 acatcgcga gctgggcgcc aagggcgacg gcaagtcgga cagcaccgcc atgatcctca 240
 aggcgtggaa gaacgcgtgc gatgcgacgg ggtacagaa gatcgtcatc tcgccgggca 300
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tcgacggcaa cctgctcggc accggcgacc tcagecgg

398

<210> 4969

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-C12

<400> 4969

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agctcgcgaa aataatgaag agccgcagca tggcatcatc ggccgcgctc ttggtgctag 120

ccctcgcgct agtggcggcc accgccccac aggtagcggg ggcaaagaag aagagagcgg 180

cggagagcgg cgaggcggcg gaggcgaaga agatccagga cgacttctgc tcgacgctgt 240

gcgagggcaa gaaggggacg gacctggctg tgtgcaagga gtcctgcgcg ctctcccagc 300

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gcatcacggc gcc 373

<210> 4970

<211> 390

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-028-Q1-E1-C2

<400> 4970

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gggtgcaatg ctctgctcct ctttgttagt gaaaacccta tcagatcggg gggagggggg 180

atgtgtgctc ggatcacctg tggcactgaa ctttttttgt tgtgggtgtg acattggctg 240

ccctctaaaa tggaagtgtt tttgogcatc gagatgcgtc agctgatgaa agaaccaa 300

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ggtgtangaa gaactctaac gaactcaaga 390

<210> 4971

<211> 448
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-B5

<400> 4971

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attataaatg tatcgaatgg atccaagccc ccactctttg ctggcatcat agcacttgtg 120
atgagcatcg caacgatggt ccgctctgacc cgcagcatga tgcttgggaa ggttctcggt 180
gctgccatag gtggagctac cctctcagaa ggtaaataca aagtacaaga gcgccagcgg 240
tccaagctat cagaagaggc tgtggaggaa gctgaagacg ccgtctctgc aaagcgcctc 300
tcggagcttg aggagaaggt cattgcactc ctgacaaaac ccgcatcaat gcctgctgat 360
aaggaggagg ttctgcaagc tgctgtctcc cgcgttagtg cactggaaga ggagcttgca 420
gctacaaaga agaccttgca ggagactc 448

<210> 4972
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-B6

<400> 4972

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cggcgcagct gccgccggcg ggcggcgccc tgaagccgga cttctatagc cagtcgtgcc 180
cgcgcgcgga gcggatcatt gcggaggtga tgcagacgaa gcagatggcg aacccgacga 240
cggccgcggg cctgtctcgc gtcttcttcc acgactgctt cgtcagcggg tgcgacgcgt 300
cgggtgctgat cgctcaacc aatttcaaaa gtccgggcaa gacgccggaa ttaaacaatt 360
ccttcccggg gaagcctttc aagccgttgg tccccgaaa cctggccctg aagctggagt 420
gccccggggt ggtgt 435

<210> 4973
<211> 441
<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-B7

<400> 4973

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accttcgccg tgatcgacc cgctctcttc tgtgccggcg ctggcaccgc cgtcgacaag   180
gactctcccc gactacgtcg tccagggccg cgctcgattgc gacacctggt gcgccggggtt   240
cgtgaccaat gtcaccgagt acagcgcggg cgccaagggtg aggctggagt gcaagcagtt   300
cggcaccggc aatgctcaag cgctcgagcg actgggtgac cgacgggaac ggcgtgtaca   360
ccatgaagct caaagacagc caccaggagg aggtatgcga ggtggtcctg gtggagagcc   420
cgcgcaagga ctgcgactag g                                     441

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<210> 4974

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-B8

<400> 4974

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tctctgccca cctcgccacc accgcctccg cccaccagaa agacatccac gtctctcgga   180
gcgtcgacgg ctccagcgac ggcagcagcc ccgagtcga aggccgcgtc gtctacgcgg   240
acatgaagct ggctgatacg gaatccgatg cgccggcgcc ggcgcggcg cgggggccgt   300
cgtccggttg aactgagaag cgtgcgtcca gccaaagcaag gtgggtcaaaa ccgagaacta   360
attaacggct cgatcgtgtg tcaggetact actgttcttg ccataattat atatagatac   420
g                                     421

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<210> 4975

<211> 452

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-C1

<400> 4975

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gagtacttca ggcggcagca gctcacggag aagtcgacg tctactcgta cggcgtggtg 120
ctcttcgagg tgctctgccc acggccggcg ctgaaccga gcctgccgag ggagcaggtc 180
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aagtgcctgt gtgaccatgg agtggaccgg ccgtccatgg gcgacgtgct gtggaacctc 360
gagttcgctg tgcagatgca ggacaccttc gagaacggcg ggaagccgga cgggtggaaga 420
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<210> 4976

<211> 474

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-C2

<400> 4976

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aacatgatgt gcgccgctga ccctcgccac gggcggtacc tcaccgcctc ggccatgttc 180
cgcggaaga tgagcaccaa ggaggtcgac gagcagatga tcaacgtgca gaacaagaac 240
tcgtcctact tcgtggagtg gatccccaac aacgtgaagt ccagcgtgtg tgacatcccg 300
ccgaggggccc tgtccatggc gtccaccttc gtcggcaact caacttccat ccaggagatg 360
ttccggaggg tgagcgagca gttcactgcc atgttcagga ggaaggcttt cttgcactgg 420
tacacgggcg agggcatgga cgagatggag ttcaccgaag ccgagagcaa tatg 474

<210> 4977

<211> 460

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-033-Q1-E1-C4

<400> 4977

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ggcggggaaa ggcgaagaag ctcagcagaa atggcggagc aggcaggcgc cggaaggtag 180
tggtgccaca tgtgcgccgc ggtcgtgagc cccgcggagg gcgaggcgga ngtgaagtgc 240
ccgcattgcc acagcggctt ccttgaggag atggagaccg tccgcggcac gcccgcgccc 300
gatgacggcg acggtgacgg cgcggtggct caagtgtacc ccggcgccga ccgcccagc 360
tccatctggg cgcacgtat cctcagcacg gtcgacagct ccgtccgccg ccgcccgaac 420
cggcggcaga cggaggccgc cggcgacgtc tacgacggga 460

<210> 4978

<211> 112

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-C5

<400> 4978

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<210> 4979

<211> 402

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-033-Q1-E1-C6

<400> 4979

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gcaacgccga ccacaaggac agcagcacca aggtggaaca gccggcggac agtccttga 120
agccggcgag cctgaacgcg ttcgacatca tctccactc cagagggttc gacctgtcaa 180
gcctgttcga ggtggaccaa gagcagaagg ccagcaactc gcggttcattg accagaaaac 240
cggcgtcggc gatagtgtca aagctggagc agatcgctga gacagagcgc ttcattgtga 300

agaaacagga cgggctggtg aagctgcang ggtccaagca agggaggaag gggcagctcg 360
cgatcgacgc cgagatcttc gaggtgacac cggcctttca cg 402

<210> 4980
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-C7

<400> 4980

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gccgccatcc gagcgaacaa gccaacccgac cccgtcccca aggcaatccg ccgccgacgt 120
accaccacca ccgcaggagc gagatggaga tgaagaggat cctcttcgcc gtcctcgctcg 180
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gcgcgcgcgc cgcggggccc tccgccagca gcggcgccgc cgcctctgcc gccgcgcccg 360
ccgcgtctct cttctcctc ctgcctact acctccacta agcgtgtgcg t 411

<210> 4981
<211> 219
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-C8

<400> 4981

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gaaggaggag gaggaggtgg agtcgcccac gagaggagca gctctgtctc cgggtgcctga 180
tgctagcctc gtctcctcag ccgcgatctc gactgatga 219

<210> 4982
<211> 421
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-C9

<400> 4982

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gagacccccg tgaagctcgc tgaatacttc aacgtcaccg acgggggtgtt cagctacaac 120

cagatgggag acgtgcccc cgcctgaac ggccccctcc atgtcatccc caatgtcatc 180

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tccctccacg tcgatggcta cgccttcttc ggcgtcggga tgggccccgg gaagtggctc 300

ccggagggtga ggaagacgta caacctgctg gacacgggtga gccggcacac gatccagggtg 360

taccgcgggt catggacggc aatcatgctg acgttcgaca acgccggcat gtggagcgtg 420

c 421

<210> 4983

<211> 450

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-033-Q1-E1-D1

<400> 4983

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gcccacgggg cgcaaggagg aggaccatcg gcatcggcgg cggacctgga caaggtcacg 240

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ctgtttgggg acaccgttcc taaaacagca gagaacttcc gagcactttg cacaggggag 360

aaaggaatgg ccaagtccgg caagcctcta tggtaacagg ggtcgacgtt ccacaggatc 420

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<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-D10

<400> 4984

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agtacgtacg tacgtgtaca cctgattatc cgaagaagat ggccagccga ttattaacca 180
ttggctatct tcgatcgggg ccaatttcag aaggaatttc ctttactttc tgtagcaaat 240
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<210> 4985

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-D11

<400> 4985

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tccgccgacg cccccgccc cgctgctgac gcacctgccg atggacctag cggaccggcg 240
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tccaccaact aaggccaagc acgtcgggtc ggttgcattt ggaacaagac atggaagaaa 360
agtgagagca atgtcgttta aaacaaaag tccataataa tgtgtgggtca ttcgtgatat 420
g 421

<210> 4986

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-D12

<400> 4986

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gcccaggagc gccgtcgtga tcgccattcc ggggaacggg ccctggacca ccgggaagga 420
ggcccttccc tc 432

<210> 4987
<211> 459
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-D2

<400> 4987

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<210> 4988
<211> 451
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-D3

<400> 4988

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ctcgccctcg cttccgcggc cgtcgccgtc gccgtcaccg tggaagccta cgaaggcgac 180
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acgcatgagc cactgtactt gcaatggaag gactggaact gcaagagtga atgcagatac 360
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<210> 4989
 <211> 419
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-033-Q1-E1-D5
 <400> 4989

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 tgccacggca aaacaccttc gccggcgaga gcatggcgat ggcgtagcgt gtccctggagg 120
 tcacctgggt gtcggcaaata gacctcaaga aagtgtcgct cttctcccg actcgcatct 180
 acgcggtggc ttccatctcc ggattcgacc tccgcatccc tccccacagc acccaagcag 240
 accacagcaa cggctgcaac ccctgctgga acgcggtggc acacttcccc atcccggtcg 300
 ccgctgacac ccggggcctc gactccacg tgaggctccg cgcccagcgt ctatacctgg 360
 gcgatcgga catcggcgag gtgtttgtgc ccatcgacga actcctggcc ggcgccgac 419

<210> 4990
 <211> 406
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-033-Q1-E1-D6
 <400> 4990

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 aagaagcccc acgtcaacca cggcaagttt aaggcgagc cgtggacgga cgggcacgcg 180
 acgtactacg gcgggcgga cgggttaact gacaccacgg acagcggcgc gtgaggctac 240
 aaaggcgagc tggggaaaga ctaccgcacc ctgactgcgg ccgtgggccc gtcgctgtac 300
 accaacggca ccgggtgccg cgcgtgctac gagctcaagg gcccgaagg caccgtggtg 360
 gtgacggcca ccaacgatgc cccccgcg gtgagcgggc agaagg 406

<210> 4991
 <211> 349
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-033-Q1-E1-D7

 <400> 4991

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 aaagacagat cacatcaatg ccacacggat cacagtgctg ctgtctcacg tcatgaaagg 120
 cactgccccg ggtatcaact gatgtaagtc caggatgctc gacatcaaga tcgagcacgc 180
 attatagcat gaccattaag gatatcaccg taagcacgcc atccgaagta gagagcactg 240
 acgccttcaa catctgaagc tccacgacta tgtctatcat tacttcgacg atcggtactt 300
 gctaatagtg cgtttccagt gaaccgcgat gaaactccat catgctgaa 349

<210> 4992
 <211> 433
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-033-Q1-E1-D8

 <400> 4992

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 cgccgcgctc tccgtcgcgc tcctcgccct cgccgccgtg ggcgaggcgc acagcgccac 120
 cgaattcctc aacatcttca aaccgcggaa tgagcacgac tacttccaca acgcgaacca 180
 ggaggaggat gtgatgcccc gggccagcga ccagcagaac ctcataacgg cgccggtgac 240
 caagagcggc ctcatgaagg tgccgccccg gtccgcgccc accgcggtgg cgcaggacac 300
 ggtggtgctc cccgtggaca gcgcgcggg gttccccggc gcttggtcca tcatcagcga 360
 gaacgcgggc gtgtccgcga tgcacctggt gatcatgccg agcgacaagg ccatcatgtt 420
 cgacacggtc aac 433

<210> 4993
 <211> 454
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-E1

<400> 4993

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gcacgatcgc cggcaccacg aacggcctgc gcatcaagtc gtacgaggac tccaagtcgt 120
cgctcaaggc cagcaagttc ctgtacgagg gcatcaccat ggacaatgtc tcctacccca 180
tcatcatcga ccagaagtac tgccccaaca acatctgcgt caagtccggc gcctccaagg 240
tgggcgtcaa cgacgtcgtc ttcaagaaca tccacggcac ctccaacacg ccggaggcca 300
tcacgctcaa ctgcgccaac aacctgccat gccagggcgt gcagctcgtc aacgtcgaca 360
tcaagtacaa tggatccggc aacaagacca tggcgtctg caagaacgcc atcggcaagt 420
ccatcggttt ggcaaaagag ctgcctgca tctg 454

<210> 4994

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-E11

<400> 4994

attctaggggt cgaccgacgc gtccagggat aaattacacc aaataccagc ctcttttgac 60
tcacgctgcc tgaataaac gttacaaga accagtaac cgtcatttgg aattggatgc 120
tgagaggtaa ccataccagg acccagactc ctggagattt cagaccagag ccgctgtcga 180
ttatcacagc ttctgctgaa acgccatcat ccgagcttag gtggggcagg tgactcattg 240
acaactggct gtcctcggtc gaatccgtgg tgctaata gtcgtttctt tctgaacacg 300
gggggaaaag gcggagactg cggtagatgt aaatctgtaa atcattgctg gatagctccg 360
gttgctccc ttttactacc caacattcta gatttagtaa atataactaa ttctgac 417

<210> 4995

<211> 380

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-E12

<400> 4995

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atccggatcc atgtccgcag gcatcgccct gccaccctcc aacgccggag cgccctccta 120
cggggcggcg gcgccgttcg gaggtgccgc ggacgcaccc gccggcacct ccgagggccc 180
tgccagcgcc agcgggcat cagctggtga cgcgccggcg tatggcgcca gcgccagcgg 240
cccgactgct gatgtccgg cgggcgcggc ggcgcgcgcg tcgtccgggc cctctagcgc 300
acccgcgcca tcgtcgtctg agtcctccgg cgcaccaggg ccgtcgtcgt ctgatgggtc 360
ctccggcgcc ccggcgcaat 380

<210> 4996
<211> 461
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-033-Q1-E1-E5
<400> 4996

gggccagaac tcccgggtcg acccacgcgt ccaaccacgc ttccgcgtcc gactccatcg 60
cctcgggtgaa gtcgcgcgtg cagacgtccc ggggcgtgag ggcgcgcaag cagaagctcg 120
tcttcggcgg gcgcgagctg gcgcgcgacg acgggcgcat cctggactac ggcgtggcgg 180
acggcaacgt ggtgcacctg gtcattccgc tcccggacgt gcgcctcatc accgtggaga 240
ccgtgcaggg cggcaagtgc aggttccgcg tggagcccgg gcgcaccgtc ggggtacgtga 300
agcagcagat cgccaaggac caccgccggg gggcgcgccc cggcgagcag cggctcgtgc 360
tcgagggcga ggacgtcgac gatcgccacc tcattccaga agtgtgcatg ggccgacggc 420
cccgtgatac acctgctggg tcggcgctcc gtcttcgcgc g 461

<210> 4997
<211> 187
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-033-Q1-E1-E6
<400> 4997

ccacgacgtc cagcacgtac gagctcagaa ggaaggcaga ggcaaaagca gccatggcga 60
actcgtcgtc cggccttgcg gtcaacgacg agtgcaaggt gaacttcggg gagctgaagt 120

cgcgggcggag cttccggttc atcgtgttca ggatcgacga cacggagatc gagatccggg 180
 tggagcg 187

<210> 4998
 <211> 312
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-E7

<400> 4998

ccacgcgtcc gaggcgaggg gcccgggcgt cttcgccgcc gcggtcgtgg tgtttctgcc 60
 ggtcttattc cccgggttgt tctccctct tggccacgt ttccttctg tcctctcgga 120
 gtggaatgcc cctaatacaa tgcatacttc acttttgaat gatgccttgc gatggacatc 180
 tatagaccga catgataaag atctatagtc acccttgcca tagcaggggt ggaaaccatg 240
 cttaagtgcg tgagtttctc acaaattacc cctggaatca cgttgatacg tccaagtatt 300
 tcctgatggg gg 312

<210> 4999
 <211> 331
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-E8

<400> 4999

tcacgagtc gacgtaacgc ctccgctgt gcaagaccag gatgaacgcg tcgctcagct 60
 tccgcatcca gggtcacgac atgaacctca tggagctgga aggctcacat accctgcatg 120
 acgtgtacga ctgctggac gtgcacgtcg ggcactggct ctccgtgctg gtcgacgccg 180
 accaggcgcc cggcgactac tacatgggtg gtcacacgcg gtccatccac gaagccaagt 240
 ccgcctcggc cgtcatccgc gacgcgggt ctagcggcgt cccgcggggg ccgaacatga 300
 ccgagccagc ggccgcggtg ggcttggtcc a 331

<210> 5000
 <211> 401
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-E9

<400> 5000

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ccggcggcgg ggaggccgcc gaagctgtcg atggagacgt ttcgggggat gatcaagagg 120
ccgttcgcca agttcctgag cccggtgac aagggcgtgt gcgccaagac ggagtaccgc 180
gaggactgcg agtcgtcgat cgggggcctc ccgggggccc cgtcggcggc ggccacggac 240
agcgtggggc tgctgaagct ggccatggag gcggtgcggc agaaggccat cgaggcgatg 300
aacgcgccca cggacaggat gaacgcgcgc ggcacggacc cgacgaccaa ggaggcgctc 360
gactcgtgca cgtcgtcgta cagcgacatc aagacgagcc t 401

<210> 5001

<211> 447

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-F1

<400> 5001

gtcgaccgac gcgtccgctc cccgactacg tcatccaggg ccgcgtgtac tgcgacacct 60
gccgcgccgg gttcgtgacc aacgtcaccg agtacatcgc gggcgccaag gtgaggctgg 120
agtgaagca cttcggcacc ggcaagctcg agcgcgccat cgacgggggtc accgacgcga 180
ccggcaccta cacgatcgag ctcaaggaca gccacgagga ggacatctgc caggtgggtgc 240
tggtggccag cccgcgcaag gactgcgacg aggtccaggc gtcaggggac cgcgccggcg 300
tcctgctcac caggaacgtt ggcatctccg acagcctgcg ccccgccaac ccgctaggct 360
acttcaagga cgtgccgctc cccgtctgcg ccgcgctgct caagcagctg gactcggacg 420
acgacgacga acagtaaact ataacac 447

<210> 5002

<211> 378

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-F10

<400> 5002

gacccacgcg tccagaaaac cttggcattt tcacaaacag gcttgcttcc ggtgacgcca 60
 gaggtagtca agaagacgtg ctgtttgaag agcatgagca tacaacagct gatgggtctc 120
 cttccaacgg tgacaagttg agcggcgtag cgaatcttaa ggctgggatt tctctgctca 180
 atataagact gagggcactt gaagacgacc aggagtttct caagcaggtg ttgagttccc 240
 tccaatgcgg tagtgatgga atgcagtgtg tacaggagat aagcggccat ccagcagagt 300
 tgcgaaaagt tgtaactcgc taaagaaaat ggttttgccc cgagtccaca ctgttaggtc 360
 atcgtgaggt cttctcat 378

<210> 5003
 <211> 393
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-033-Q1-E1-F11
 <400> 5003

attctagggc cgaccgacgc gtccacatcc gttgatccat cttgctaata agcctgcgtg 60
 cccctcgttc ttccctgtct cgatcccgac gacgctccgt tcggctccgg caaaccacat 120
 caagtcgcga tggagatgaa gaaggtcgcc tgcgccgtcc tcgccgccgc cgcctccgcc 180
 accgtggtcc tcgccgccga ggccccggcg cccgccccca ccagcgcctc ctcggccgcg 240
 ttcccggccg tcggcgccgt gctgggcgcc tccgtgctct ccttcttcgc ctactacctg 300
 cagtaaaatt aaaggaggat cggagggaga ggctgctggc tgccattgcc tgtattcggc 360
 tggattccgt ttatatatat atttaagtac ttt 393

<210> 5004
 <211> 420
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-033-Q1-E1-F2
 <400> 5004

gggtcgaccc acgcgtccgg ggcaagacgt accgcctccg cgtgtgcaac accgggatca 60
 aggcgtcgct caacttcgc atccagggcc acgacatgaa gctcgtggag ctggagggct 120
 cacataccct gcaggacgtg tacgactcgc tggacgtgca cgtcggccac tgcctctccg 180

tgctgggtcga cgccgaccag gcgcccggcg actactacat ggtggcctcc acgcggttca 240
 tccacgacgc caagtccgcc tccgcgtca tccgctacgc cggctccagc ggcgccccgc 300
 cggcgcccaa catgaccgag ccaccggccg gctgggcctg gtccatcaac caggccaggt 360
 cgttccgctg gaacctgacg gccagcgccg cgcgccccaa cccgcagggc tcctaact 420

<210> 5005
 <211> 327
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-F3

<400> 5005

cgcgtccgga gcccgcaaca tgaactgagc ccagcgctag ctgctgccgg gggcgcgccg 60
 tcgtcgccga gccggtcggc ctggtctggt ctggtctgcc tgcttgccaa gtcacgcagc 120
 ctggctccac cgatcgaca ccatacattg acgtcgtcgt cgcggccgta cgtgccgttg 180
 gacggtggag gaggcggtgg cgctacgaca gtatatatat acacaattac acatacacac 240
 cccaaaaaga aaagaaaaaa actactgcca ttgctgtcgt tgtgcgtagc ttctctctat 300
 atatataccc gtatttaaata tctcgac 327

<210> 5006
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-F4

<400> 5006

gggccgacgc acgcgtcgga gcagagacag gcgtcttcgt actcgcttat ctccgcgacc 60
 caaagcgttc ccccttctcc cattcttctc tcatttctca ccaccgccgc cgtaccccc 120
 ttctgacaac accatgaggg agtgcattct gatccacatc ggccaggccg gtatccaggt 180
 cggaacgcg tgctgggagc tgtactgcct cgagcatggc attcaggctg atggtcagat 240
 gcccggtgac aagaccattg ggggaggtga tgatgctttc aacaccttct tcagtgcagc 300
 tggcgctggg aagcacgtcc cccgtgctgt tttgttgac cttgagccca ctgtcatcga 360
 tgaggtgagg actggcacct atcgccagct ctccatcct gagcagctca tcagtggc 418

<210> 5007
<211> 125
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-F5

<400> 5007

acgcgtccgg ctggctatgt cagagccgga tgtcctgcga gacctgcggc accgggttct 60
cgacgaccat cgccgtgtac accgcggact gccaaagtga cgatcgagtg catgcagtct 120
ctcgc 125

<210> 5008
<211> 398
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-F6

<400> 5008

ccacgcgtcc gtgccaccct cgtctcacc tcctccctc acacaaataa taaggaaagg 60
tcccgccctt ttctccgac atccacagg gggaggggaa aacacgtgca ttcaccggc 120
ggcaataatg gcctcgggtc cggctccggc gacgacgacc gccgccgtaa tcctatgcct 180
atgcatcgtc ctctcctgtg ccgcgggtga cgacccaac ctccccgact acgtcatcca 240
tggccgcgtg tactgcgaca cctgccgcgc cgggttcgtg accaacgtca ccgagtacat 300
cgcgggcgcc aaggtgaggc tggagtgcaa gcacttcggc accggcaagc tcgagcgcg 360
catcgacggg gtcaccgacg cgaccggcac ctacacga 398

<210> 5009
<211> 217
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-F7

<400> 5009

ccacgcgtcc gggcagccga ggcggcgag aagctggccg acctggaggc gcagcggcga 60
cgcaacgccg aggtgcgcgc ggcggggag gccgacgaga aggtgcgcgc cctggatgcc 120

atctccaacc acgacttccg gtaccgcaag taccacatcg acgagatcga gattgccacg 180
gagcgcttct cgcacgagcc caggatccgc gagggcg 217

<210> 5010
<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-F8

<400> 5010

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cctccacctg cgaggacgcc tgcaaggacc tgccaagaa cggcgacaag gacgacgtcg 120
tcaacttcag cctcgacttc gagaagctgc agcgcgtcac gctggacctc atcaccgagg 180
catccggatc catgtccgca ggcatcgccc tgccaccctc caacgccgga gcgccctcct 240
acggggcggc ggcgcggttc ggaggtgccg cggacgcacc cgccggcacc tccgagggcc 300
ctgccagcgc cagcgggcca tcagctggtg acgcgccggc gtatggcgcc agcgccagcg 360
gcccgactgc tgatgctccg gcga 384

<210> 5011
<211> 390
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-G10

<400> 5011

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caccaagctc aacaacagcc agctcgcgaa aataatgaag agccgcagca tggcatcatc 120
ggccgcgctc ttggtgctag ccctcgcgct agtggcgggc accgccccac aggtagcgga 180
ggcaaagaag aagagagcgg cggagagcgg cgaggcgggc gaggggaaga agatccagga 240
cgacttctgc tcgacgtgtg gcgagggcaa gaaggggacg gacctggtcg tgtgcaagga 300
gtcctgcgcy ctctcccagc agtccaacct ggtgctgtac ggcaggatcc agtgcaaggg 360
caagtgcacc gagcagaagg gcatcacggc 390

<210> 5012
 <211> 382
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-033-Q1-E1-G11

 <400> 5012

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 ccttttccga cattcacagg ggggacagga aatcagcggc catggcctcg attccggcga 120
 cgaccttcgc cgtcatctta tccgtcctct tctgtgccgc ggtggcacc gccgtcgaca 180
 acgacctccc cgactacgtc atccagggcc gcgtctattg cgacacctgc cgcgcggggt 240
 tcgtgaccaa tgtcaccgag tacatcgagg gcgccaaggt gaggtggag tgcaagcaact 300
 tcggcaccgg caagctcgag cgctccatcg acgggggtgac cgacgggaac ggcacgtaca 360
 cgatcgagct caaggacagc ca 382

<210> 5013
 <211> 389
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-033-Q1-E1-G12

 <400> 5013

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 ccagcaccta agtcattacc tccacctact cccgtgagct cgccgcctcc agaagtgaag 120
 tcctctctc caccaacccc agttagctca ccaccaccag cgccgaagtc gtcacctcca 180
 cctactccag tgagctcgcc acctccagaa ctgaagtcct ctccaccacc agccccagtt 240
 agctcaccac catcagcgcc aaagtcgtca cctccacctg ctctgtaag cttgccacct 300
 cctgaagtaa agtcttcccc accaccagca ccgattagct ctccaccacc tccggccaag 360
 tcaccacctc caccggcccc tatgagtc 389

<210> 5014
 <211> 144
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-033-Q1-E1-G2

<400> 5014
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 ttttaaaaaa cttgtcaatc aattttcttaa ctcttcgctg ttgtttaaaa gagaagagtt 120
 aagaaatgga ttgacaagtt atat 144

<210> 5015
 <211> 438
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-G3

<400> 5015
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 cctcctcgtc atcgtggccg ccctctcggc gcgcgccgcg gcgcagctgc cgcgggccgg 120
 cggcgccctg aagccggacg tctatagcca gtcgtgcccg cgcgcgggagc ggatcattgc 180
 ggaggtgatg cagacgaagc agatggcgaa cccgacgacg gccgcggggc tgctccgcgt 240
 cttcttccac gactgcttcg tcagcgggtg cgacgcgtca gtgctgatcg cgtccacca 300
 gttccagaag tcggagcacg acgcggagat caaccactcc ctccccgggg acgccttcga 360
 cgccgtggtg cgcgccaagc tggccctgga gctggagtgc cccgggggtgg tgtcctgcgc 420
 cgacatcctc gactggc 438

<210> 5016
 <211> 88
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-G6

<400> 5016
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 cctgcgctat cagttgcagt agtcttga 88

<210> 5017
 <211> 446
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-G7

<400> 5017

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agggtcccgcc cttttccgac attcacaggg gggacaggaa atcagcggcc atggcctcga 120
ttccggcgac gaccttcgcc gtcattttat ccgtcctctt ctgtgccgcg gctggcaccg 180
ccgtcgacaa cgacctcccc gactacgtca tccagggccg cgtctattgc gacacctgcc 240
gcgcggggtt cgtgaccaat gtcaccgagt acatcgcggg cgccaagggtg aggctggagt 300
gcaagcactt cggcaccggc aagctcgagc gctccatcga cggggtgacc gacgggaacg 360
gcacgtacac gatcgacctc caaggcaagc cacaaggagg acatctgcga ggttgtcttg 420
gtggagagcc cgcgcaagga ctgcga 446

<210> 5018

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-G8

<400> 5018

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gagtcaaagg gcatcgatgc gaaagcgtcc gggcctggtg ggtccttcga catcaccaag 120
ttggggcgct ccggcaatgg caagacagac agcacgaagg ctgtgcagga ggcatgggca 180
tcggcggtgcg gcggcactgg gaagcagaca atcctcatat ccaagggtga cttccttggtc 240
ggacaactca acttcacagg cccttgcaag ggcgacgtga ccatccaggt ggatggcaat 300
ctgctggcga ccacggacct aagccagtac aaggaccatg gtaattggat cgagattcta 360
cgcgtggata acctgggtcat caccggcaag ggaaaccttg acgggcacgg cccaaccg 418

<210> 5019

<211> 403

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-033-Q1-E1-H1

<400> 5019

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gggtgcgcct gctctaccgc agggcgctca aggacacgct caactgggcc gtccaccgcc 120
acctcttcta ccaggacgcg tcggatctcc gggacaagtt cgaggccaac cgacacgtgg 180
ataacctgga cgtggtcgat aggtcatcg acgatgcgga ggctcagtac aggaacttcc 240
agcaccgccga tcctacatt gttccatggg caccaggcgg cactaaattc acaagaaacc 300
cccctccacc tcaagggatc gagatcatct acaattatgg caaggaggac cagtaaacia 360
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<210> 5020

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-H10

<400> 5020

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tataacccaa ctacttctcc tagtcttgtt gcatctgcac agggctctaca gaatgaggac 120
ttctccgcaa gccagctaag taaaatgttc ggatctcatg caacgatgat ggccaacacc 180
cttcgcacac caatcattgt atttacacag acaggctcca tggctgtcct cctgagccac 240
tatcgtcctt cgtctacact atttgcatth acaaacgagg aacgagtga gcaacggcta 300
gcactctacc agggcgatc cctattcac atgcagttct ctgacgacgc agaagaaact 360
ttctccagaa caattaacag cttgctgaaa gcacaatatg tgaagaaggg agactac 417

<210> 5021

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-H11

<400> 5021

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ctcgtcgtgg ccgccctctc ggcgcgcgcc gcggcgacgc aggtgccgcc ggtgggcggc 120

agcgctctga agccggacta ctacagccag tcgtgcccgc gcgcggagcg gatcatcgcg 180
gaggtgatgc agacgaagca gatggcgaac ccgacgacgg ccgcgggcat gctgcgcgtc 240
ttcttccacg actgcttcgt caccgggtgc gacgcgtcgg tgctgatcgc gtccacccag 300
ttccagaagt cggagcacga cgcggagatc aaccactcgc tccccgggga cgccttcgac 360
gccgtggtgc gcgccaagct ggccctggag ctggagtgcc ccggggtggt gtccctgcgc 420
gac 423

<210> 5022
<211> 397
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-033-Q1-E1-H2

<400> 5022
gtcgaccac gcgtccgaac ccctatcgca ccgcagccgc cggccatggc ctgcctcacc 60
gacctcgtca acctcaacct ctccgacaac accgagaaga tcatcgcgga atacatatgg 120
atcgggtgat ctggcatgga tctcaagagc aaagcaagga ccctctccgg cccggtgacc 180
gatcccagca agctgcccga gtggaactac gacgggtcca gcacggggcca ggcccccggc 240
gaggacagcg aggtcatcct gtaccgcgag gccatcttca aggaccatt cangaggggc 300
aacaacatcc ttgtgatgtg cgattgctac accccagccg gcgagccaat cccaccaaac 360
aagaggtaca acgccgcaa gatcttcagc agccctg 397

<210> 5023
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-H5

<400> 5023
ccacgcgtcc ggtgagaacc atgtggtcgt cgatgcgggc acatggtgcg atggctgtgg 60
cgttggtgtt cttggtgagc ggcgcgtggt gcggtcctcc caaagtcctc ccaggcaaga 120
acatcacggc cacctatggc aaggactggt tggacgctaa agcgacatgg tatggcaagc 180
cgacgggtgc cggccccgac gacaacggtg gcggtgcggt gtacaaggac gtgaacaagc 240

cccccttcaa tagcatgggc gcatgcgga acatcccat cttcaaggat ggtctgggtt 300
 gtgggtcctg cttcgagatc aagtgcgata agcctgtgga gtgctccggc aaccccgagg 360
 tgggtgcacat caacgacatg aactatgacc ctatcgcggc gtacaacttc gatttagcag 420
 gcacggcggtt cggcgccatg gc 442

<210> 5024
 <211> 434
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-039-Q1-E1-C5
 <400> 5024

ctcgcgggtc gaccacgcg tccgcgcact gccatgcgcg cggggtgatg caccgggaca 60
 tcaagtgcgc caacctgctg gtgaacaaca gcggcgagct caaggtggcg gacttcgggc 120
 tggcgaacct cttcgcgccg gcgcggcgcg cgccgctcac cagccgggtg gtcacgctct 180
 ggtaccgccc gccggagctg ctctggggcg ccacggcgta cgagccctcc gtcgacctct 240
 ggagcgccgg ctgcgtcttc gcggagatgc acgcgcgcgg gcccgctctg catggcgcca 300
 ccgaggtcga gcagatccac aggatcttca agctctgtgg ctgcggccc gaagacttct 360
 ggcgcgcgtt ggggctctcc cagggcgccg tcttcgccc gcagcaacct taccgagcc 420
 gcctccggga caac 434

<210> 5025
 <211> 432
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-039-Q1-E1-C8
 <400> 5025

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 ggagcgtccg ctccaacatc tgggagaggc agtacctcgg cgagcagctg tacgtgagcg 120
 tcatcccgcc ggagcggtcg ctcaaggacg agtacaacat gccggagacc agcctccgct 180
 gcggcaaggt cgtcggcctg ccgatgccac cgtcctaccg cgccgtctag agcgtcgacc 240

gatcgcgcac ggtgctgtac acaactaaag gagagcgaga ggggactttt tctcgcgttt 300
 ccttctctag ccagccttgt ctgtccctc ctcggttatt ctctctctct cttttttttc 360
 gttcgttcc gaggaataat agccaaaana aaaataaaca atggcggccg ctctagatga 420
 tccaagctta cg 432

<210> 5026

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-D1

<400> 5026

cggtcgacc cagcgtcta cacacacgtc tgcaattcgt tcctttcaca ccggagaccg 60
 gcgagcagag ccgcgcacag cagaacgcgg aagcaagagg aggcgatcga ctactcgacc 120
 agccctctcc gctcttgtct ccgatggcgg ctcggtcct cgcgccctc gcccttgccc 180
 tcgccctcgc cctcgtcgcc gtaccgcgtc ccacgcgggc gtccaacgac gagggggacg 240
 cgctctacgc gctgcggcag cggctgtcgg accccaacgg cgtgctgcag agctgggacg 300
 ccacgctcgt caccctctgc acctggttcc acatctctg cgaccaggtc ggccgcgtcg 360
 tcgcctgga cttgggcaac tccaacgtct cgggtccat cggccctgag etc 413

<210> 5027

<211> 361

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-D10

<400> 5027

tcgcgggtcg acccagcgt ccacggacgc ttgggcgacg ggcagggagc cctggtgtgg 60
 aacaagaacg agtgccagcg ttctacaac tgcaaatcc tcccaacag cctggtgctg 120
 gacttcgtga cgaacgcca gatccgcggc atcacgtgc tgaacagcaa gttcttccac 180
 atgaacatct tcgggagcaa gaacgtggtg atcgacaagg tgacgatcaa ggccccggc 240
 aacagcccca acacggacgg catccacatc ggcgactcga gcaacgtgac catcagcggc 300
 accaccatcg ccgtcggcga cgactgcgtc tccatcggcc ccgggagcaa gaccatccg 360

<210> 5028
 <211> 389
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-D12

<400> 5028

ctcgcgggtc gacgcacgcg tctgacacag acgtcctggt agggcatggg cgaagctaag 60
 ctcaacagcg tgaccgtcct gctggtggac ctccgcctcc tgagcagtgg cgttcaggac 120
 gctgccgcca tgccaggcac gttgaactac gacgcgattg tcgccgacga gccaaacgga 180
 aagaacaagg acctgtgccg cctcgtcgcc aacgccata gatacaccgg cgggtgcgag 240
 cccatagaac gctgcatggg cgcgcgctga tcagtaagca tatacatata gcacatcgat 300
 ttcttaatat tgcattgcac tgtatataag tgctcattgt cttgctgttg taagtgccag 360
 cacaagcata tgtacggcgt ttatgtata 389

<210> 5029
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-D2

<400> 5029

gcgggtcgac ccacgcctct acacatggct cctactacat cgtgcccagac ctectcttct 60
 tcggcgcttc ctgcacgcgc ctcaccgatc gctccgacgc cgtcgaggtc tccgccatca 120
 aagccgcat ggacgccatc ggggtcccca tgttcggcct cgtccgcgtc agctacggcg 180
 gcttcgtcgc ctaccggatg gccgccatgt tcccggaggc ggtccaccgg gtcgccctgg 240
 tctgcgctgg ggtctgcctc aaggatatag acctggcgga gggcctcttc cccgtggcct 300
 ggatcgggga tgccgcgcgc ctgctcgtgc cgcacgccc ggaagaagtg cgcgcctac 360
 tccgcctcag cttcgcgcgc acgcacctca tcatgccctc ctgcttcta tgcgactaca 420
 tcaaggt 427

<210> 5030

<211> 170
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-D3

 <400> 5030

 gggtcgaccc acgcgtctaa agacacttgg gccaatcaga agctcgctct ctaactgact 60
 catggggaga gttcttttgt tggacggaga gttcaaaatc caaaaatctt ggtgtatgta 120
 cagttgtcta tgaggaatac taacacgtct tgcagtgcct ctgcctctcc 170

<210> 5031
 <211> 419
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-039-Q1-E1-D4

 <400> 5031

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 gcctcgtcct gtacttcagg gtgtccgaat gctacgacaa ggaggtttcc gaacatttca 120
 aggagtctat gatgaggttt ttcgaggacg aaaccgagaa ggtgaaaggg ttcacgtcag 180
 aatccactgt gagctacaga gatcggctga agatcatggc cggcctggtc aaccgggacg 240
 acctccagct gggctctacg gagaggaagc tcgtccaggc gtacaacgag aagccagtcc 300
 tctcgcggcc ccagcacagc ttctacgagg gagaggacta ccttgagggtg gaccttgaca 360
 tccaccggtt cagctacatt gctaggaang ggctggactc gttcaaggca cgcctcaag 419

<210> 5032
 <211> 374
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-D7

 <400> 5032

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 accacgacat gtggcagtcg ccgagcgagt gcgccgggga gatcaaagag gcgctcgacc 120
 acctgaacga caccgagggc ggctcgcagc acagcaagct ccacgacgtg aacctgtgcc 180

tggacacggc ggaggaggac acgtgggtcct gcgacgtctg ctgcaagcac gccccatcca 240
 ggcccgtcaa aaccacgctg ctgccagga tcaaggactt cgacgcgctc atgcgcgctca 300
 cccacgcgct catcaagcag gccactggtg ggcgccgtga cgcgccggcg cgggcgcacg 360
 ccgtccgcgc caag 374

<210> 5033
 <211> 394
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-D8

<400> 5033

gcgtgggacg atgcaagcgt ctaaagtgag tcgtattatc accgtcctcc tcgcggaaga 60
 gcacgtccgc ggctgcagg tccgccgcgc cgccgccgac gactgggtca acgtgcaggc 120
 cgtccgcgac gccggcatcg tcaacgtcgg cgaccaagtc gagagactga gcaacgccgt 180
 gtacaagagc atggagcacc ggggtggctgt gaacgccgac gaggagcgca gttccctcgc 240
 gcatttctac aagcccatgg gcgacgtccc catcgcccc ggcgccggagc tgggtggcggc 300
 tgtgagcctg ccggcgctct acctgatgag gatcgtcgac gagtacaggc tctacgtcga 360
 gaagaatggc gccagcggca acgaggacat cgag 394

<210> 5034
 <211> 315
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-D9

<400> 5034

acaatactct aaagtgagtc gtattaagag gagccattat ctccagcctc gcgcccagtc 60
 tctttctcgt tatggtgccg tttcttcatt accatggaca aagttttctg tcggtctgtc 120
 ggcagccgct ttctcggact caacaagact gtaatgtcta ctgttgetat gtaatgcttc 180
 tcaattgtca ttttgacac atgtgcgacg tatacagttt taatgagatg tctgatgagg 240
 ctacttgcaa cactacatgt ggtgttctca atgaataata tcaattgttg agctctcatt 300
 aaagaaaaac tgctc 315

<210> 5035
 <211> 371
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-E10

<400> 5035

tgcgccgtcg acccacgcga ccgaccacgc gtccggggcgg cggaagccag gaggctagcg 60
 ccgcggaggc ggaggaggaa gtggtgagac tgtcaccgga gctggcgatg cacggcgcca 120
 tcgacccggt gacgctgccg tcgtcgacgt cgaagcggcg cctgtccatc agcgtgagca 180
 agaagctgag catgaacatc ccggacaagc tgcggctgag ccggcgggag cacaaggacc 240
 accaccacaa ggtggagtcg gaggacacgc tgtggaagaa gggcatcatc ctccggggaga 300
 agtgcaggat cccgggcgag agggatgcgg agaccggcga gcccgtcgac cccgccgacg 360
 agatcgccgc c 371

<210> 5036
 <211> 404
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-E11

<400> 5036

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 ctctctagct gggggtgctc tctaccgttt cgagtacga gtcaaccggg cgctcttctc 120
 cgccaaagcg cgaggaggga cgtgcacgct cgctccctct gaccctgacg acacggtggc 180
 tcgccgcgcc agatacctgc tgagcaacgg ttccaggtgc tacaacctgt tcaagagcaa 240
 ctgcgaggac ttcgcgatat actgcaagac tggccttctt gtcgctgagc agggcgttgt 300
 cgggcagagc gggcaggcta tctccatcat cgggtggacct ctgcgcggcg tgggtctcgac 360
 ccatttcgc ttggttacca cgaacatcta tgggatggcg gtga 404

<210> 5037
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-E2

<400> 5037

gcgggtcgac ccacgcctct acactacgcc ctggtacact tcggtcggcg caccgtctcc 60
gacggcgacg gcatcacctg cttcggctcc accaacgtgt ggctggacca cctctccctc 120
tccaactgcc aggacggcct catcgacgtc atcgccaagt ccaccggcgt caccatctcc 180
aactgccacc tcaccaacca caacgatgtc atgctcttca gctccagcga caagcatccc 240
gaggaccaga tcatgcagat cactgtcgcc ttcaaccact tcggcagagg cctcgtgcag 300
aggatgccaa ggtgccgctg gggcttcttc cacgtggtca acaacgacta cagcactgg 360
ctcatgtacg ccatcggcgg cagcaaggcc cccaccatca tcagccaggg caaccgctac 420
atcgcgccgc cca 433

<210> 5038

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-E3

<400> 5038

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ggcgtgatac ctgttcttca caagctggtc ctcttctggc accaaccgga ggcattgcac 120
acgaccggat acgaaattct gatggggctc ttctacgggc tgggagcatt ggtatatgcg 180
gcacgggtac ctgagcgtg gatgcctggg aagtttgaca tcgccgggca cagccaccag 240
ctgttccacg tcttggttgt tgccggagcc tacacacact accacgcagg gcttgtgtac 300
ctcaagtgga gagacctgca aggctgctga aaggctgtgc atcgttgagg atgtggatag 360
attgtagatt ccgtgaattc aggetgaagg tcatggtctg ttgtaaattg taacagtaat 420
catgaaaca t 431

<210> 5039

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-E4

<400> 5039

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gctggtcgcc gttgtaccg gtggccgccg atgtcgccaa cgccggccac gccaaagcccc 120
tgacgcctgg cgggcgctg gtacaccaca accacggcaa gttcacggcc gggccgtgga 180
aaccgcccc cgcgaccttc tacggcgggc gggacgggtc cggcaccacg gggggcgct 240
gcgggtacaa ggacacgcgc gcgcaggggt atggcgtgca gacggtggcc gtgagcacgg 300
tgctgttcgg tgacggcgcg gcttggggcg ggtgctacga agtgcgtgc gtggacagcc 360
ctagcgggtg caagcccagc gcggcgacac tgggtggtgac ggcgaccgac ctgtgccgcg 420
ccaacgacca 430

<210> 5040

<211> 268

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-F11

<400> 5040

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cgaataacta ataacatctc ctcgagcgcg aggccggctt ccttggacca atccagcagc 120
aagcgacccg gccagacca gcagccatgg agatgaagaa ggtcctctgc gccgcgctcg 180
tcgccgccgc ctccgccacc gccgtgctgg ccgaggtcgc ctccgagtcg cctccgagg 240
cgcccgccgg cgcgccgct ctagagga 268

<210> 5041

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-F12

<400> 5041

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gacgacgacg tgccgccaca tccacatggc ggacgacgcc gtcgccggcg gagcgggcgt 120
tcgctgcgca gggccggcg cgccctcgct gtcttctagc aggaagcagc agcagcagcc 180

cgacgacgcc ggctgcggca gcagcgacga ccactaccag cacgacgtga tcatgctgag 240
 gcggacgagg agcgggcggg cgttccccgcc gccgatctcc gtgatcggca agggcgggcg 300
 gccgtggctc tgcctgcggg cgcaccgcga gggcggacgc ctgctgctgc ggcagatgcg 360
 cctgccg 367

<210> 5042
 <211> 389
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-F2

<400> 5042

gcgtttcgac ccaagcctct aaagtaagtc gtattaaaca aaacataaac caagaaaaaa 60
 aaagaaaata acagttacac aaaagcaaca aaaacaaaga tgaacatgaa caaaaggggg 120
 gccgctctag aggactctac gctgtacatc cccatccagg caacttccca acccgctcaa 180
 aatgtcacca atgttgattt cacgggcatt acttttaacg cgtccaacca tggaaaaagc 240
 ctggcttaat gtaactgaat ccctttgcga caaatgcccc tttctgaagc tggagtaaaa 300
 acaaacaggc cggcaactat cgcctttcct aacatttgcc ccgcgcgatt ggcaatcgga 360
 acgcccattg tcccggccca ttaaccgcg 389

<210> 5043
 <211> 425
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-F4

<400> 5043

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 gtaggcgttc aaaccatctc gtagattcag ccattcccgt taccattcct acgctagtca 120
 taatcatgca tgcgctgtga tccctcccaa cttgcagaag aaatggttct gctgtgtctc 180
 gccagtcctc acacagtctt gaggaagcta atgagccgtg cagtgtctga gcagtttctg 240
 tgatggttat gtgtagctct tcgaattcaa tctatactg cttgccagtg acaggggctc 300
 tatgtatagc cattgcaaat gagaaaatta ctctgatggg tgtctgctta tagcgttctt 360

agctgtgtat accatcagtt caagctgatg tctgcttgta atttttctttt ctgggccctt 420
ctcta 425

<210> 5044
<211> 374
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-G11

<400> 5044

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cgggggccct gcacggcgac caaccccatc gaccagtgtt ggcggtgccg ccgcgactgg 120
gcccgcgacc gcaagcgctt ggccaggtgc gccatgggct tcggccacag gaccaccggc 180
gggctggccg gcaagttcta cgtggtgatt gacccagcgc acgacgccgc cgacctcgtc 240
acccccagga agggcacgct ccggcacgcc gtgacccggg cccgggcgct gtggatcacc 300
ttcgcgcgcg acatggtgat cgagctctgc caggagctca tcgtgagcag cgacaagacc 360
atcgacgggc gccg 374

<210> 5045
<211> 414
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-G6

<400> 5045

cccacgcgtc caggcgccgc cgattgttca tcccgcacga cggctgggga acagtggaag 60
acgcgcggtt cagatctgcc gtcgtcatcc atggcggtgg cgctccgtgg tctcattggc 120
gcccgtatcc gtggtggcct cgggtgcgctg ccccgcccat ctacgcgcgc ctgaaacaat 180
ggtgctgatc tgtgtcgctc agcccatatg tgccgccttg ctatttaatc tgcacattat 240
ccttcaccac ttgccaaagg aatctcatcc acgaagtgtt actgtgatat tgttgcccgt 300
gttttttttt ctttctgcct ggaatcctct cggacggcat acccacgtaa acgaagtgtt 360
acttgccctg aagaatatct caagtgtcaa aggattgatt attattcttt gttt 414

<210> 5046
 <211> 417
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-G7

 <400> 5046

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 aagctcaccg cacctccctt cctcgccgcg gatccccac tactccggta gaaaatggct 120
 gacgctgagg atatccagcc cctcgtctgc gacaacggaa ctggcatggg caaggctggg 180
 ttcgccggcg acgacgtctc gagggccgtc ttccccagca tcgttgggcg cccgcgccac 240
 accggtgtga tgggtgggat ggggcagaag gatgcctacg tcggcgacga ggcgcagtcc 300
 aagaggggta tcctgacctt caagtacccc atcgagcacg gaatcgtcag caactgggac 360
 gacatggaga agatctggca tcacaccttc tacaacgagc tccgtgtggc tcccagag 417

<210> 5047
 <211> 360
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-G9

 <400> 5047

 ttacaacacc ctagagttag tcgtattaga ccaactcaact tcacaggccc atgcaagggc 60
 gacgtgacca tccaggtgaa tggcaatctg ctggcgacca cggacctaa ccaagtacaag 120
 gatcatggta attggatcga gattctacgc gtggacaacc ttgtcatcac cggcaagggg 180
 aagctcgacg ggcagggggc agccgtgtgg agcaagaact cctgcgtcaa gaagtacgac 240
 tgcaagatcc ttcccactc gctggtgatg gacttcgtga acaacgggga ggtgtccggg 300
 atcacgtgc tcaactccaa gttcttccac atgaacatgt acaagtgcaa ggacatgctg 360

<210> 5048
 <211> 296
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-039-Q1-E1-H11

 <400> 5048

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 ccgtcacctg cgggcggggtc gacgacgacc ctccggtcgat ctgggttcaa tagccccctg 180
 tcagtcacaa tcgtaagcgc cacggtcgca gtggagtcgc tcctcgtata ttctattcag 240
 atgcccccca gagcaggagc atcaacgggc cggagcagat gaaggtggac ggagat 296

<210> 5049
 <211> 406
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-039-Q1-E1-H4

<400> 5049

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 ccatgctagc agtggtcgcc gatgtcgcca acgccggcca cgccaagccc ctgacgcctg 120
 gcggggcgct ggtacacgac aaccacggca agttcacggc cgggccgtgg aaacctgccc 180
 acgcgacctt ctacggcggg cgggacgggt ccggcaccac ggccggcgcg tgcgggtaca 240
 aggacacgcg cgagcagggg tacggcgtgc agacggtggc tgtgagcacg gtgttgtttg 300
 gcgatggcgc ggctgcggc ggggtgctac aggtgcggtg cgtggacagc cccagcgggt 360
 gcaagcccga cgcggcggcg ctggtggtga cggcgaccga cctgtg 406

<210> 5050
 <211> 209
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-A11

<400> 5050

acaccctaga gtgagtcgta ttaacgacct ctctgctgt cgctgctggt cgccatgcta 60
 gcgggtggccg ccgatgtcgc caacgccggc cagccaagc cctgacgcc tggcggggcg 120
 gtggtacacg acaaccacgg caagtacacg gccgggcccgt ggaaaccagc ccacgcgacc 180
 ttctacggcg ggccggacgg gtccggcac 209

<210> 5051
 <211> 216
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-A12

 <400> 5051

 ggggtccatcc acgcctctaa atggcgctcgg cgacgactgc atctccatcg gccccgggac 60
 ctccaagggtg aacatcaccg gcgtgacctg cggccctggc cacggcatca gcatcggaag 120
 cctagggcgg tacaaggacg agaaggacgt cacggacatc aacgtcaagg attgcactct 180
 taagaagacg atgttcggcg tccgcatcaa ggcgta 216

<210> 5052
 <211> 406
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-A5

 <400> 5052

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 tacatccaca cagctaacgt ttatcacccg gacctgaagc caaagaatat attagcaaatt 120
 tctaactgca aactgaaaat ttgtgatttt ggactagcac gagttgcatt caatgatacc 180
 ccaacaacga tcttctggac agattatgtt gcaacaagat ggtacagagc tccagagctc 240
 tgtggatcct tcttttcaaa gtatacaccg gccattgaca tttggagcat tggatgcac 300
 tttgctgagg tgtaaacagg gaaacctttg tttcctggta aaaatgttgt ccatcagtta 360
 gacttaatga ctgaccttct aagcacgcca tcgatggata cgattt 406

<210> 5053
 <211> 61
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-A9

 <400> 5053

 aatagcgact cactagtgtg tctgcgtatt gtcttacaac accctataag tgagtcgtat 60
 t 61

<210> 5054
 <211> 209
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-B10

 <400> 5054

 acaacactct aaagtgagtc gtattaaaca tagcagcagc actcacaata gcaaaaacca 60
 ccatccgtcg tcgccaaccg tagcaaggag ccaaggacat caccaccgcc cagcaataat 120
 ggcgagagc atgaggattg tggcgctggc cttggtggcc ctgctggtgg tggcgggcggc 180
 ggcgcccgtg gccaccgctg acggctgct 209

<210> 5055
 <211> 397
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-B2

 <400> 5055

 cgggtcgacc cacgcctcta caggttctcg acgaacgtgt ccaggagcgt ggccggcgcg 60
 acggtggagg tgggtgcccg gcacttcggc gcgtccaagg agacgctcaa ggcgaggagg 120
 acgacggacg acagcgggtg gtacaagctg gagatcgacc aggaccacca ggaggagatc 180
 tgcgaggtgg tgctggcccc gagccccgac ccgggggtgcg cggagatcga ggagttccgc 240
 gaccgcgccc gcgtcccgtt cacctccaac aacggcatca agcagcaggg cgtccgctac 300
 gccaaaccca tcgccttctt ccgcaaggac ccgtcaagg agtgcggcgc cctcctcgag 360
 aagtacgatc tcaaggacgc ctccgagacg ccatgat 397

<210> 5056
 <211> 385
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-B3

 <400> 5056

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cctgctcctc ttctctggcc gtctcgccgc ggcggagaag actttccgcg gaggcggagg 120
 cggaggctac ggcggttgg aggcgggtgg cggaagcggc ggcggcggct actccacccc 180
 gagcgaggca gcgccatcca cgcctgccgc tggggagacg acgaccctt cgtcaggcgg 240
 cggttactcc acccctagcg aggcagcgcc atccacgcct gccgctgagg agaccacgac 300
 gactccttcg tcaagcggcg ggggttaccg cggtgcaacc ggcaaagctt cctcaagcgg 360
 cggcgggctt ggacccgacg gggac 385

<210> 5057
 <211> 235
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-B5

<400> 5057
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 ccggcgccgg cgccggcacc gggagcgccg ctgggccctc cgccagcggc gccgcgcccc 120
 cgctcaccgg cgcgccgggc gcgttcttgg tcccgtacg cggcgactac ctgcactaag 180
 cagatggacg gatggacgct cgcattggcat tggcatgcct ggagtgttga acatc 235

<210> 5058
 <211> 225
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-B6

<400> 5058
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 cttctctata aataatatct aactccaaca agatatgttt gatgatggat cgcgatctat 120
 catatgtatg ccattcattc gtttaatttga aaagatgatg ctgaaaaaga gaagctacac 180
 tagaagaaga aaacgaaagg gcggccgctc tagaggatct aaacg 225

<210> 5059
 <211> 202
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-C10

<400> 5059

tacaacactc taaagtgagt cgtattaatc cgccgccgcc gccgctcgtc tccctgagag 60
gtgccgggac cgaggaactg gccgagtact aggtagagaa tcgggtttttc ttgtctcagc 120
ccgggggtctg ctgcgtctgg tgggtggtgaa ggggagaaat tcgtgagatc tgttcgggat 180
caggcgtgcg agctcgggaa tc 202

<210> 5060

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-C4

<400> 5060

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gccttggtcc tcttggtcct cttctgcac gtgcatggtg agaaggaaga gtcaaagggc 120
atcgatgcga aagcgtccgg gcctggtggg tccttcgaca tcaccaagtt gggcgctccc 180
ggcaatggca agacagacag cacgaaggct gtgcaggagg catgggcacg gccgtgcggc 240
ggcactggga agcagacaat cctcatacc aagggcgact tccttgtcgg acaactcaac 300
ttcacaggcc cttgcaaggg cgacgtgacc atccaggtgg atggcaatct gctggcgacc 360
acggacctaa gcc 373

<210> 5061

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-D2

<400> 5061

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atcacctga ccgtctgcgc gcggcggtc tcacacaccg gcgacacgca gggcgcgcat 120
aggcgagggc ctcccccccg gcgagggatg gtgtggtcgg ctgggatggc aacaatgcca 180
ggcgctccg ccgcgcgct actggtgctg gcgctcgccg ccgccgtggc gcgcgcggag 240

gacccctacc acttcttcga gtggaaggtg acgtacggga cgaggaccat catggggacg 300
 gcgcagaagg tgatcctcat caacgacatg ttcccgggcc ctaccatcaa ctgctcatcc 360
 aacaacaaca tcctcgtcaa cgtgttcaac atgctcgacc agccgctcct 410

<210> 5062
 <211> 348
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-D3

<400> 5062

gcgggtcgac ccacgcgtcc aaataaatca cctcaatgat aaccagaaaa cgcagcaggg 60
 tagtacatga tcgccgcgac aaacagtggc gcgtcgaagc acgtaccacc accaccacgc 120
 gcacacctcc tcgccgccg cgcccgactc catacatata cagccccgcc gacacctcac 180
 acagagacac acacgacacg agctggactc acgcacgcca gaccagacga atcatatattt 240
 ggagcaggaa ccacgtatcc agcgcggatc tagcagaaga ggtagccgaa ggccggcggcg 300
 gcgagggagg ccgcggcgag gggtacggcg gccgctctag aggattca 348

<210> 5063
 <211> 378
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-D4

<400> 5063

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 gattgtaaaa tctcatggcg tatgtttaga gggtatcaga tggggtgggt caagcagacc 120
 tgacttcaca tgtaaaagta ccaaagtcgt cctgggtgtc gtgcacgcca ctggagatga 180
 accttacatc ccattctccc atccatttgt ttttaagagat gctgggtgga aagttaattg 240
 tgatggatcc aagaagacag agaacatgtg attgacctaa ggcagtttca gctccagaga 300
 aggtccatta ctcatggaaa tgctaagagc aagagtgaag agttccctac cctcacatta 360
 aggtggtacg gttggtgt 378

<210> 5064
 <211> 390
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-D5

<400> 5064

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ctcgcggggtc gacacacgcg tctacacaca cgtctgccaa cgcgtccgag cctgtacatt 60
ctctctctcc tctctcggcc ttcttcgcgt gtttccctct ttttcttagg ccgccctcta 120
cacttctcga cataaccatc gagagggcgg tcgagagaaa cgagagcggc agacaccatg 180
gggagctcga ggaccatcgt tgcgtccccc ctgctcctcc tcgccctcct cctcctggct 240
ttcgcggcca ccgccgaggc ccgcgttgct cccgagctgt ttggcgagga ccaattccag 300
cggacatgca accaggtgca cttcaggaag atgtgccaga gcttgacgag gctcccgagg 360
gtgaccacgc cgcgcgagct gctgctggcg 390
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<210> 5065
 <211> 331
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-D6

<400> 5065

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actcgccggt cgacacacgc gtctacagga acacatagca agctagccag ccagccagca 60
gccagcttgc tcgccgcgcc cgtccttctt cctcgctctc gttccgttcc gttccgtccc 120
gcccgcgggc ggccgcgcaa tcaaggaagg agatgaagaa gattgcctgc gccgtcctcg 180
tcgccgcctc ggccgggcaac gtggcgctcg ccgcggaggc tcccgggtccc gggcccaaca 240
gcggctcttc cgccgtcgcg cccgccgtcg gcgccgcctt cggggccgcc gtcgcctccg 300
tcttcgccta ctacattcag tgagccgggc g 331
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<210> 5066
 <211> 382
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-E1

<400> 5066

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 gggccagcca aagcttgcca tggcagccgt ccggtccgac aggggtccacc accaccaccg 120
 ccgctccgag gcgtcgtgcc cggcaacctc cgcgggcgtg gggcgggcga gggccgatga 180
 cgccctgcgc cagcgcccg cgggggctcgt gcaggtccgg gagcgggatc agggcccgct 240
 gtcgacgggg caccagcacc tgcaccacca tcaccaccag ctgcggcggt cggcggcgtt 300
 cccaccccg cgccggggg cggggcgccg ccctcctcag cgctgcgaaa gcgacctcaa 360
 catcaggag caccgctcct gc 382

<210> 5067
 <211> 371
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-E3

<400> 5067

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 caggtggtca ccgcgcggcc acccatgggg ctacgcctc acgtcgagaa ggccatcgac 120
 gcgggcacct ttgagcagat gtcgacatc accgtcaagg actggcccg cgaggaggcg 180
 ctcggtacg ccaagctcgc gctcaagtgc acggagatgc ggcgaggga ccggccggac 240
 ctgccacag tcatactgcc ggagctcaac cggttaagga acctcgcca cgcgtacgag 300
 gcacgcatga gcgccccag ggccaacggt ggaagtggag agagtgggtgc ccagatcagc 360
 ggggactcga c 371

<210> 5068
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-E4

<400> 5068

gggtcgaccc acgcgtctac ccacgcgtcc gagagcacc tgtgctgctg accgaagccc 60
 cactcaacc aaaggctaac agggagaaga tgacccaaat catgtttgag actttcaatg 120
 ttctgccat gtatgtcgcc atccaggctg tgctttccct gtacgccagt ggacgtacaa 180

ctggtattgt attggactct ggtgatggtg tcagccacac agtgccaatc tatgaaggtt 240
 atgcccttcc tcatgccatc ctgcgccttg accttgctgg gcgtgacctg actgacagcc 300
 tgatgaagat cctcactgag agaggttact ccttcaccac ctctgctgaa cgcgaaattg 360
 taagagacat caaggaaaag cttgcatatg tggctcttga atacgacc 408

<210> 5069
 <211> 312
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-E5

<400> 5069

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 cccctcggg ggcgaattta tggcttggtt aaaaaaatcc cctcgttggtg cccacccgc 120
 tcccgggtta cgtcctgcgc gccaccctcc ggctgggccg ttgcagagtg ggcggtgacg 180
 gcccgtagt gatggggggc caaggtttgg ggattttctc ggccgggacc atgagggcgg 240
 tctttccctc cccggccgag ttttatataa acaattttta aaaaaagac aaaaaaaaaa 300
 aaaaaattca ac 312

<210> 5070
 <211> 199
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-F11

<400> 5070

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 aggcccaatt agaaaagggtg gtttccatca aagaaccggg tggaggggaaa ataatgggag 120
 acatcgaaaag ttaatttggtt acatgggtgtg gccggtcaag agtgtctctc cgcacctatt 180
 gcaaaacggt aaagaattc 199

<210> 5071
 <211> 212
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-F12

<400> 5071

ccttccaact ccctaattgtg agtcgtatta acggcggaaa gggagctcaa ggcggcggag 60
gaaggcggtc gccacagtcg ctgatttccc tggggaagag atgggtctct cctttgggaa 120
gctgttcagc cgcctcttcg ccaagaagga gatgaggatt ctcatggtcg ggctcgatgc 180
cgccggtaag accaccatcc tctacaagct ca 212

<210> 5072

<211> 179

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-F6

<400> 5072

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tcacgcgtgc ctgttcgcgc taaggcgagt agacggatgg cagtgtcgca gggagctgtc 120
gtagtcgtgt ttctcggcgt cgcagcgggg tgggaacgat cgatgccaga gtgggggagt 179

<210> 5073

<211> 400

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-040-Q1-E1-F8

<400> 5073

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gcaggccggc tggccggtcg tcgatcgagg aaccaagctg ctgctgctgc taccggacga 120
caccaaccat gatacggagg acgacggtgt gcctaggcct gctgcttcta ctactggcgg 180
cgtcgactgc gacggcacat ttctcgatcg gcgacgtgga cgagtacttg aacaggcgca 240
cgcaggagtc ccgccacagg aaccacggcg gcgcgcagat caatgacctc atctccagtg 300
ctgcgcgctt ccacgccaac gtggatgcac gcgcgtatgg tcgccgctcc aacctgcagc 360
tgcagganga ggaagcagca gctaccgcgg ggcgtgttac 400

<210> 5074
 <211> 209
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-G11

 <400> 5074

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 gaaactaatc actgaaagta ctgtctatga tgctcgtacc aggctgccat ccattatgcc 120
 caatcttgaa actcttgta taaactcatt tgattgggtt gttgatgcac caatgctgcc 180
 taccaaattc ctctgtctta agcacctga 209

<210> 5075
 <211> 205
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-G12

 <400> 5075

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 tcttgccacg gcaaaacacc ttccgccggcg agagcatggc gatggcgtag cgtgtcctgg 120
 aggtcaccct ggtgtcggca aatgacctca agaaagtgtc gctcttctcc cggactcgca 180
 tctacgccgt ggcttccatc tccgg 205

<210> 5076
 <211> 366
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-040-Q1-E1-G8

 <400> 5076

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 aagcctcccc gaccgcaca tctattaggt gcagccatgg gtgcctgtgc aacgaagcct 120
 aagacgcttg aggggaaagc cccagctgag gccaccatct ccacacccaa ggttgcacct 180
 gagaccacta ccatccacat tgaggttgcg gcaaaacatg cagtagttga gaaggtggag 240

gaggacaagg aggaggcact aacagtggcg gcgaaacaag agccagcagc caccattgag 300
 cctcagcaga ttgctagtga ggtgaccact tcggaagtgg cggtcgtcgt tgcgagcct 360
 gagaac 366

<210> 5077
 <211> 75
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-G9

<400> 5077

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 tggcatcatc gtcag 75

<210> 5078
 <211> 294
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-H1

<400> 5078

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 tgaagaacaa caacaacaac aaaaatatat atatggtgct gcgtatgcc attgtaacag 120
 ttgatgagat ctgtgactcc ccgtgccgtg tcccgtgagt tgctgatgat ttcaccccc 180
 ccccccccc cccaacaca cacacacttt ttttaatctt tccccttatt atgggggtccc 240
 aaattgatgc ggagatctcg agcgactctg caaatttcag atgagtggac aaaa 294

<210> 5079
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-H3

<400> 5079

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 gacctcgcgg cggcgggtgga acacgccagg ctgcgccgat ggaaggggtct gaagctgttc 120

ctggactact ccggcaccac cgggcgcagg aaagcgggtgg ccaccccacg tggcgccatg 180
gcggtgggca tgtccagccg ggacgcgtgg ggggcggcgt acagcgggggt cgccgccggg 240
gctgccctcg tcaactggcat cggcgtcatg gcgtagctgc gaagatctgc ctagctagtg 300
tgggtggcgcg gcgggcgcggc gcgcatattc gccaatgcaa gagcaagggg ttctgtcct 360
gccttcgaat caccacagag gtgctagtat gtgtggat 398

<210> 5080
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-040-Q1-E1-H4

<400> 5080

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tgcagtacca gaaggagtgc gtcaaccagg tgctcaaggc ggccatggcc attaacgcgc 120
aggtgctcgt ggagatggag atcccggaga tctacattga gtcgctgcca aagaaaggga 180
agacgagcct gggcgacgcc atctaccgga gcatcaccga ggaaacgttc gaccgcgtgg 240
agttcttggc cgggatggac ctttcgacgg agcacaaggt gctggacctc aagaaccgca 300
tcgaggcctc caccgtgatc tggaagcgca agatgcagac caaggactcc aagtcctcgt 360
ggagctccat cgtcagcttc gagaagcgcg agca 394

<210> 5081
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-C2

<400> 5081

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caccgcacct cgctcctca ccgcgtttcc tccgttaatc cggtagaaaa tggccgatgc 120
cgaggatata cagcccctcg tctgcgacaa cggaactggc atgggtcaagg ctgggttcgc 180
cggcgacgac gccccgaggg ccgtcttccc cagcatcgtg gggcgccccg gccacactgg 240
tgtcatggtc gggatggggc agaaggacgc ctacgtcggg gacgaggcgc agtccaagag 300

gggtatcctg accctcaagt accccatcga gcacgggacg gtcagcaact gggacgacat 360
 ggagaagatc tggcatcaca cttctacaa cgagctccgc gtggctcccg aggagcaacc 420
 cg 422

<210> 5082

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-C3

<400> 5082

cgggtcgacc cacgcgtcca cccacgcgtc cggccacgcg tccgcccacg cgteccgcca 60
 cgcgtccgcg ccgacatcga ccctgaccgc ctaccgcaaa tcctgtacga agacgaggac 120
 cgggacaagg tgggtctcgc gtcggacgac gacctcgcgg cggcgggtgga acacgccagg 180
 ctgcgccgat ggaaggggtct gaagctgttc ctggactact ccggcaccac cgggcgcgagg 240
 aaagcgggtg ccaccccacg tggcgccatg gcggtgggca tgtccagccg ggacgcgtgg 300
 gcggcgggcg acagcggggg cgccgcccgg gctgccctcg tcaactggcat cggcgctcatg 360
 gcgtacctgc gaagatctgc ct 382

<210> 5083

<211> 436

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-C4

<400> 5083

gggtcgaccc acgcgtccga acagggagaa gatgaccag atcatgttcg agaccttcaa 60
 ccccccgct atgtacgtcg ccattccaggc cgtgctctct ctgtatgccg gtggccgtac 120
 cacaggtatc gtgctcgact cgggagatgg tgtgagccac accgtcccca tctacgaggg 180
 atacgccctc cccacgccga tccttcgcct tgatctggcc ggtcgcgacc tcaccgacta 240
 cctgatgaag gtccctgactg agcgcggcta ctccctcacc accaccgctg agcgggaaat 300
 catgaggggac atgaaggaga agctcgcccta catcgccctg gactacgacc aggagatgga 360
 gaccgccaag accagctctt ccgtggagaa gagctacgag ctccccgacg gacaggtcat 420

caccatcggg gccgag

436

<210> 5084
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-C5

<400> 5084

aattcgcggg tcgaccacg cgtccacgac gttgagaaca cggacggcgt ccacgtcggg 60
ggctcctcca agatcagcat cctcaactcg accatcggca ccggcgacga ctgcgtctcg 120
attgggcccc ggtgcaacgg cgtcttggtg gacagcatca cctgcggccc cgggcagggc 180
atcagcgtcg gctgcctagg ccgctacaag gacgagaagg acgtgagcga catcacgggtg 240
cggaactgcg tgctcaagaa caccaccaac ggcgtgcgca tcaagtcgta cgtggacgcc 300
gagtccgtgc tgacggcctc ccatctcacc ttcgagaaca tcacgatgga ggaggtggcc 360
aaccctatcg tcacgatca gtacttctgc ccgcagaagg tatgccctgg c 411

<210> 5085
<211> 349
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-C6

<400> 5085

gaccacgcg atccgaaatg agtcgtatat aagaaaagaa taaaaataaa aagaacaaaa 60
aaaaataaaa ataatacaaa caaaaaggga ggacgagcga caagtgtcgt ctcgtttgtg 120
cccgggtgtg caagtagtct tgggtgttcag tatcgtctgc ggcttcgggt tcagggtcag 180
tgtcttttgc ctatgccgct tgtaagacct ctgggatttg agcgatatca cggtttggaa 240
ctgcttgctc tttagcatca ggaacgtgcy tgcgcatcag gtcgtacgtg gtcgccttgt 300
cattgctgac ggactctcat ctcaccttcg agaccatcat gatggcgga 349

<210> 5086
<211> 409
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-C7

<400> 5086

ccacgcgtcc actcaccgag tgcttcagcg acaatgtgct gtttgaccac ctcaagggaa 60
acctgcattc acggcggtat tctgaggcca aggttacgct gtttgggccc atgccatggc 120
cgtttaatga tgggtgtgctc ttcttcaaca actcacgcga gaaggatccg ctcttgcctgg 180
actcaagctc acagagcacc agagagcttg ccttggttcc agagcctgag gtttcaggga 240
atgatactga ggtgacatca aggctgagag atgggttcaac ctctctaat ggtgtgaaag 300
gtgcacgcta tgggtgcaaaa ggccgtgcta atggtagaac tgctgctgta tctgaagatc 360
acatgctttc aaaccatgga actgatggtc ctgttggttat tcttgggtgt 409

<210> 5087

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-C8

<400> 5087

ccacgcgtcc gccacgcgt ccgcacgcc gtcgtctcct cctccgcctc cctgtcggtc 60
cgctccgcac ctgcctaaa acaccctcc gggcattgcc gcaccgagct ccccttcctc 120
aaattgcccc aagcccgac gcctcgacgc ccagctccgt gctcgagttg cttagcggcg 180
cctccatcgc tccgcctccc tatgtcaccg cccggccgct ggctcctccg ccgactcagg 240
ccggggccac ggcgcggtta tgatgcgtga ttctaggacg cgcgttgctg ctctgctgct 300
gggacgatct agccggagag agtgattatc tgtcacaatg gcctccacag atcacactg 359

<210> 5088

<211> 424

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-047-Q1-E1-C9

<400> 5088

gcgtccgaga ggacaagaac tacagctaca gcctcgaggt cggcgccaac gggaggaaga 60
tggtgtggga gggcacccca aggagcgtcc gcgacagcca ccgcaaggtg agggacagcc 120

acgacggcct catcatccag aggaacatgg cgctcttctt ctccggcggg gaccggaagg 180
agctcaagct caggatcacc ggacggatct ggaaagagca gcagacacca gacggcgcat 240
gtactccaaa tctgtgcagc taattaagca atcttcaaac acacaccttg cctgtccttc 300
tttctcttct taattaatcg tgggtggtggt gctcaaaggg attattttatt actaattatt 360
aggaggacgt angatgctcg tgtaaataaa actgtgtata ttatatggat ggcatggcat 420
ccct 424

<210> 5089

<211> 441

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D1

<400> 5089

ccgggtcgac ccacgcgtcc acccacgcgt ccggcaagga catgctgac aaggacgtga 60
ccgtgacggc gcccggggac agccccaaca cggatggcat ccacatgggc gactcatccg 120
ggatcaccat caccaacacc gtcattggcg tcggcgacga ctgcatctcc atcggtccccg 180
ggacctcaa ggtgaacatc accggcgtga cctgcggccc tggccacggc atcagcatcg 240
gaagcctagg gcggtacaag gacgagaagg acgtcacgga catcaacgtc aaggattgca 300
ctcttaagaa gacgatgttc ggcgtccgca tcaaggcgta cgaggacgcc gcctccgtgc 360
tcaccgtctc caagatccac tacgagaata tcaagatgga ggactcagcc aaccaacct 420
tcacgacat gaagtactgc c 441

<210> 5090

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D11

<400> 5090

cgggtcgacc cacgcgtccg aggacacgtg ggcggacgcg tggggtgacc ctcttaggtg 60
acgggtccaa aaattccatc gtcaccggca aaaaagctt cgccgacggg atcacaactt 120
tcaagacagc aaccttcact gcgcaaggcg acgggttcat ggcgatcggg atgggggttc 180

agaacacggc cggcgcgagg aagcaccagg cgggtgcgct gctggtgcag tcggacaagt 240
ccatcttcct caactgcaag atggacgggt tccaggacac tctgtacgcg cactccaagg 300
cgcagttcta ccgcaactgc atcatctccg gcacgggtga cttcatcttc ggcgacgcgg 360
cggcggtgtt ccagaactgc atcctggtgc tgcggcggcc catggacaac cagcagaaca 420
t 421

<210> 5091

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D12

<400> 5091

gggtcgaccc acgcgtccga cggcatccga tccatcttgg gcgggcgccg cgcgtcgagg 60
gccagccaaa gcttgccatg gcggccgtcc ggtccgacag ggtccaccac caccaccgcc 120
gctccgaggc gtcgtgtccg gcaacctccg cggcgtggc ggcggcgagg gccgatgacg 180
ccttgcgcca gcgcccggg gggctcgtgc aggtccggga gcgggaccag ggcccgtgt 240
cgacggggca ccagcacctg caccaccatc accaccagct gcggcggtcg gcggcggttc 300
caccgcgcg cccggggccg gggcgccgcc ctctcagcg ctgcgaaagc gacctcaaca 360
tcaggagca ccgtcctgc agcgaggtgg cggcgggcac cgcggccggc tgcgccgtg 420

<210> 5092

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D2

<400> 5092

gggtcgaccc acgcgtccaa atcattgcac cctccctc cgtcacccca ccacatccgg 60
ccagcccaac gaaaatgtcg cgcgccacag ctgcggtcct cttctacatc ctgcgcgtcg 120
ctgccctcag cgcggccgag gcaccggcag agtcaccgaa ggcaggcagt cctgccaaagg 180
caccggccga gtcaccgaag gcaggcagtc ctgcagctcc tgccaaggca cccgagtctg 240
ctgccacgag aactgcccc gctaaggcac ctcaagccgc ctccaccccc gccgttgccg 300

ctgccccatc gtcgtcgtcg tctaggaagt ctggtccagc tgccgcgccg accaccgccg 360
cctctacacc gtctttcttc acggacg 387

<210> 5093
<211> 386
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D3

<400> 5093

cgggtcgacc cacgcgtccg cccacgcgtc cggaagaaga agaaaaagaa gggcgccagg 60
aagggcagga aacgcgcctc catcctgggc gacgccggca ccttcgaccc ggacttctcg 120
cggcgggtacc ggctcgggcg ggagctcggg cgcggcgagt tcggcgtcac gaggcgggtgc 180
gaggacgccg ccacggggga ggccctggcg tgcaagacga tccggcggaa gcggctgctc 240
ctgcgcctcg cggggcccga cgcgaccgac gtgcagcgcg aggtggagat cacgcggcg 300
atgtcggagg tgagcggggg cagggtcgcg tgctgcgcg aggcgtgcga ggacgacgac 360
ggtgtgcacc tcgtcatgga gctctg 386

<210> 5094
<211> 385
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D4

<400> 5094

gggtcgaccc acgcgtccag caagatctaa gcaaagactt gatttagtta tggacggatt 60
ggtaggcctc ttgaaagttc gcgtgggtccg gggatatcaac cttgcctacc gcgacgcaag 120
aggcagcgat ccgtatgtcg tcctacggct tggcaagaag aaactgaaga caagcgtgaa 180
gaagagatcc gtgaacccca tatggcaaga ggagctaact ctgaccgtca cagatcccag 240
ccaaccactg aagctggagg tgttcgacaa ggacaccttc agcagagacg accccatggg 300
agacgcggag gtggacgtgg cgccactgat ggaggcgggtg agcatgaacc cgcgggagga 360
gagtctgagg aacggcgcca tcatc 385

<210> 5095
<211> 55
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D6

<400> 5095

ctatagtgag tcgtattatg agttctactc tgtctaggcg tcaatctatc tctca 55

<210> 5096
<211> 381
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D7

<400> 5096

ttcgcggggc gacccacgcg tccaaaacaa tccttgcaacc cctccccctcc gtcaccccccac 60
cacatccggc cagcccaacg aaaatgtcgc gcgccacagc tgcgggtcctc ttctacatcc 120
tcgccgtcgc tgccttcagc gcggccgagg caccggcaga gtcaccgaag gcaggcagtc 180
ctgccaaggc accggccgag tcaccgaagg caggcagtc tgcagctcct gccaaaggcac 240
ccgagtctgc tgccacgaga actgcccccg ctaaggcacc tcaagccgcc tccacccccg 300
ccgttgccgc tgccccatcg tcgtcgtcgt ctacgaagtc tgggtccagct gccgcgccga 360
ccatcgccgc ctctacaccg t 381

<210> 5097
<211> 329
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D8

<400> 5097

aattcgccgg tcgaccacg cgtccgccc cgcgtccgcc cagcgtccg caacaagatg 60
gcatgtatag acaatgcaat gagagccttg ttccttctag cgctcttctg caccgtgcat 120
ggtgagaagg caaagtcaaa ggacaacgat tcaaaagcgt ccgggcccgg tgggtccttc 180
gacatcacca agttgggcgc ctctggcaat ggcaagacgg atagcacgaa ggctgtgcaa 240
gaagcgtggg catccgcgtg cggcggcacc gggaagcaaa cgattctcat cccaagggc 300

gaattcctcg tcggaccaat caacttcaa

329

<210> 5098

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-D9

<400> 5098

gggtcgagcc acgcgtccgc gacaagatgg cgtgcacaaa caatgcgatg agagccttgt 60
tcctcctggg cctcttctgc atcgtgcatg gtgagaagga agagtcaaag ggcacatgat 120
cgaaagcgtc cgggccttgg gggtccttcg acatcaccaa gttggggcgcc tccggcaatg 180
gcaagacaga cagcacgaag gctgtgcagg aggcattggg atcggcggtg gggggcactg 240
ggaagcagac aatcctcata cccaagggtg acttccttgt cggacaactc aacttcacag 300
gcccttgcaa gggcgacgtg accatccagg tggatggcaa tctgctggcg accacggacc 360
taagccagta caaggaccat ggtaattgga tcgagattct acgtgtggat aacctggtca 420
tcaccggca 429

<210> 5099

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-E10

<400> 5099

gggtcgagcc acgcgtccga ccacacgtcc ggccagagcc tacaacggac aggtttgttg 60
tcatacttc tggaccagac gaaagatgca ttcttgaaa caccatcgcc gtccaagctg 120
acatgccata cagtggcctg tcacgttcg gaacagcatt tttgtccaag ttcgaatgtt 180
ctcagatgcc acatccactg ttagagcacg tgaccttcgt ggacactcca ggagttttat 240
caggggagaa gcagcggacg cagcgcagct acgatttcac cggagtcacg tcgtgggttg 300
cggccaagtg cgacctcatc cttctcctgt ttgatccgca taagcttgac atcagcgatg 360
agttcaagcg tgtgatcggg tctctccgcg ggcattgatg caagatacgc atagtcttca 420
acaacgccga acaagttgat 440

<210> 5100
<211> 386
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-E11

<400> 5100

gtcgacccac gcgtccgatg acatccttgt cggaggcgca caacttggag gttcgatgac 60
atcagttcct gatgaggtca ttcgatgtaa tcatgtatgc acaatcgcg tccgagctga 120
catgccagag agtggcctgt cagcgttcgg aacagcattt ttgtcgacgt tcaaagtgtc 180
tcagatgcca catccactgt tagagcacgt gaccttcgtg gacactccag gagttttatc 240
aggggagaag catcggactc agcgcagcta cgatttcacc ggagtcacat cgtgggtttgc 300
ggccaagtgc gagctcagcc ttctcctgtt tgatccgcat aagcttgaca tcagcgatga 360
gttcaaactt gtgatcgggt ctctcc 386

<210> 5101
<211> 386
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-047-Q1-E1-E2

<400> 5101

ggtcgacca cgcgtccagc cgccatcata gaaccgccgc cccgtccgag gccggactgt 60
gccctggctg gggccggtag ccgcgaccag gcaaggggcg accgcgccct cgccgggata 120
caggcgctcg ccatgcgccg tgggtccgca ccgccttga gagccgccac ggctctcgtc 180
gggcccgcgc cagtctgtc catccggcgc caggagcagc agcgccctgng cgtctctgtc 240
atgcgtgccg gtgtcagcca accccgcacc aggaggcggc cacgccgaac tccgcgagaa 300
gccgaccgcg cccgacgttg ccggatccgc accggcggtc ggtgtggcag ggacgtgccg 360
cttgccgaga gatgcagagc acccgt 386

<210> 5102
<211> 178
<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-E3

<400> 5102

cgggtcgacc cacgcgtcta gtaagaatca tgggagttga aagtgcgaca caccagagaa 60
cgtttctgtg tatactgtgt aaaggtccta aaggaaagag aagatgcaca tattcaaagc 120
ctcgggaacta attgctctgt tgtccactat gttatccaag tatatatattg ttcttcaa 178

<210> 5103

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-E6

<400> 5103

ttcgcggggcc gaccacgca tccacaagga cctggaggcc gccgcgcca tgctcacctt 60
cgaggcgggc aagacgtacc gcctccgct gtgcaacacc gggatcaagg cgtcgtcaa 120
cttccgcac cagggccacg acatgaagct cgtggagctg gagggctcac ataccctgca 180
ggacgtgtac gactcgttg acgtgcacgt cggccactgc ctctccgtgc tggtcgacgc 240
cgaccaggcg cccggcgact actacatggt ggccctccacg cggttcatcc acgacgcaa 300
gtccgcctcc gccgtcatcc gctacgccgg ctccagcggc gccccgccgg cgcccaacat 360
gaccgagcca ccggccggct gggcctggtc catcaaccag gccaggtcgt tccgc 415

<210> 5104

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-E7

<400> 5104

cgcgggtcga cccacgcgtc caatcgatca cgacaaaatg gcgtgcacaa acaatgcgat 60
gagagccttg ttctcctgg tcctcttctg catcgtgcat ggtgagaagg aagagtcaaa 120
gggcatcgat gcgaaagcgt ccgggcctgg tgggtccttc gacatcacca agttgggcgc 180
ctccggcaat ggcaagacag acagcacgaa ggctgtgcag gaggcattgg catcggcgtg 240

cggcggcact gggaagcaga caatcctcat acccaagggg gacttccttg tcggacaact 300
 caacttcaca ggcccttgca agggcgacgt gaccatccag gtggatggca atctgctggc 360
 gaccacggac ctaagccagt acaaggacca tggttaattgg atcgagattc tacg 414

<210> 5105

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-F1

<400> 5105

cgggtcgacc cacgcgtcca cgagcctcta aagcactcct ggggcgccat ctggaggaag 60
 gacagcgaca agccgatcaa gggacccatc accgtccaac tcaccaccga gggaggcact 120
 aagaccgtct acgacgatgt catccccgcc ggctggaagc ccaacactgc ctacaccgcc 180
 aaataaacta accaaataat aataagtatc aaatggcaca cttgatagac ctttattttt 240
 tatttttttat ttaataaaag gatataagga gtgtgacaaa caacaacacg aatattgtat 300
 tgtctatgta tctcctatat atgcaatccc aattttatca tggccacatt ttaaaatgga 360
 atatatgata tatatatgta catatggatt ctacatg 397

<210> 5106

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-F11

<400> 5106

gggtcgaccc acgcgtccga gctgacttct cggattggcc gggcgggaca cgcccacggc 60
 atcgcgatgg ctgcgcgcgg ccacgcgcac acggcgggcgt cccggccggc ggtttcccca 120
 ggcccagggc atccacgagg agaggacaag cgcgcggcgc ggtcgagctg ttgaaacgcc 180
 ggccgaggtt gattttctcg tgcgatggac acgacacggg gttgacgacg acacggtgtt 240
 gacgtggccg gcgcggttga cgcgttgca ttgcgcggag gaaagagatc gcgcgctagc 300
 tagctctgaa aagtcactag cgttcaggag taccaggcag gtcttgttct tttacacaca 360
 atccaacact ggattaacac ggtttg 386

<210> 5107
<211> 410
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-047-Q1-E1-F2

<400> 5107

cggtcgaccc acgcgtccac ccacgcgtcc gcagctcact accaccacct gtaaaatcac 60
ctcctccacc gggtccagtt agtcaccac cgctcctgt gaaatactct tcaccaccta 120
ctccagtcaa ctccacgcca ccacctgtaa aattacctcc tccactagct ccaatggttt 180
caccatcgtc tcccatgaaa tcccctccac caacggcacc cgtcagctcg ccgccaccgc 240
ctgtaaaatc acctcctcca ccggctcctg tgatttcacc atcacctccg gtgaaaatcc 300
tcccaccacc ggcaccagtt agtcacctc ccccgccaat tcgcgtgagc tcagcacccc 360
catttgcaaa atccccaccg ccacagttca natcacctgc accaccaact 410

<210> 5108
<211> 389
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-F3

<400> 5108

cgggtcgacc cagcgtcca gctcctatcc caccgccac ccgtcgacgc cggcctctct 60
cctcaccgc tcggagagtc ggagcccggc ggccggaggg cgacgtcgtc cctaataaat 120
actaataatt tatcactata cataaccaat atataagcca tgggcaagcg cagcgtccct 180
cggtagcctg aggacgagga caaaggcggc tgctgcggct gcctgtgctg gtgctgctgc 240
ttcctgttgt tcatcgtggc ggcgctggcc ggcacggccg cctacttctt cttegtgtac 300
aagcccaagg cgccgtccta ctccgtgagc aacatgtccg tctcgcagtt cgacttcagc 360
acctccgacc tgacgctgta cgtcaagct 389

<210> 5109
<211> 385
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-F4

<400> 5109

cgggtcgacc acgcgtccag ctacccgtcc ttcggtaggt gcattgcttc ggtggtcacc 60
atggcgcagc gagcgggtggc cacgatgacg actaataagc ccctcctcct cctcgccctg 120
gcgtccgcgc tccttgggtgc ggcgcgggcc gccgcgaacg cgcccgggcg ggcgttcagc 180
aactgggtgg cgatgaacca gcagagctac gcgctgtacg cgcagaagtc cgtcggggac 240
gggggcaagg agcccctgga caagaagctg tcggaggcgg agaagaagaa ggtcacgtac 300
gtggtggacc ccagcggcaa gggcgactac accaacaatca ccgcggcgct ggaggatatc 360
ccggtgagca acaccaagcg cgtga 385

<210> 5110

<211> 72

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-F5

<400> 5110

caaaagggttc aaagcttagt tagccgtgca tgcaaatca tacccttct atagtgtccc 60
caaattccaa tt 72

<210> 5111

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-F6

<400> 5111

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acgcacggtc ccggtcccaa tggcccagac tctgtccgcc gcctcggagc tggccaccct 120
gaagcggccg ttcggcaacg acgggttcgg cgatggcagc aacaacggca gcgcgaccgg 180
cgagaagccc aaggcgcggc ggcgggaggc ggaccggcg gcggcgatgg ccgcggcgcg 240
gcacgagttc ggcgagcacg ggcggcgtgaa catgtccatc gaggcgtcgg cgacgttcac 300
ggtgatggag ccggacacga tgcggcggtt gttcgcgggc gagctgggccc ccgaccgcgg 360

cgacatgtac atctacagcc ggcacttcaa cccgacggtg ctggcgctgg gg 412

<210> 5112
<211> 202
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-F7

<400> 5112

tcgccggtcg acccagcgtg ctaaaatcaa tcataataac ataaaaataa taaaaaacia 60
acacaaaaaa aataaaaaaa aaaaaaaaaat cagtcagaag aaaacaatac taaaagggc 120
ggacgctctc atggatcaaa gcttacttcc gctataatac caattcatac accttcaata 180
gcgtcaccta cattgaatta ag 202

<210> 5113
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-F9

<400> 5113

gggtcgaccc acgcgtccaa ccggagtcgg cgtgcctagc tcgatcttga accatagcta 60
gccagcatgg cgcccagcag cagcatagca gtactgctgc tcctcgtcgt cgccgctcgtc 120
ctctccaacg tccccctctc gggcgccctg gcctcctcgt cgtcgtctct gctgcaccag 180
tcgtctccgt ctgagagtga gactgagacc gacagtagca gcggagaatc ttcttcgtcg 240
tcgtcgtcgg aagaggccgg cgagaaggag aaggagaagg agcaggagat ggagaaggcg 300
gtcgcggcgg agaaggctgc ccagcaggag ctgctcaagt acgccaagga gaagggcatc 360
gtgtcaccga ccaacggcac ggggcggtac aagggcatcg cccgggagtt cgtggacgcc 420
cacaacgagc tccgcgcgcg cta 443

<210> 5114
<211> 402
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-G1

<400> 5114

ccgggtcgac ccacgcgtcc gccacgcgt ccgaagagct acgcaaacgc acagcgatgc 60
acaagcacga gataccagcc accatgcgcc tgtccctcct cctcgtcgtc gtggccgccc 120
tctcggcgcg caccgcggcg cagctgccgc tggcggggcg cggcggcggc gccctgaagc 180
cggacttcta tagccagtcg tgcccgcgcg cggagcggat cattgcggag gtgatgcaga 240
cgaagcagat gggaacccg acgacggccg cgggcctgct ccgcgtcttc ttccacgact 300
gcttcgtcag cgggtgcgac gcgtcgggtg tgatcgcgtc caccagttc cagaagtcgg 360
agcacgacgc ggagatcaac cactccctcc ccggggacgc ct 402

<210> 5115

<211> 347

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-047-Q1-E1-G10

<400> 5115

ttaaattttg cgacaacaat cagaatcgct ttgccaatgt ccacaataag ttacagctca 60
gatacaatac atagaacgcg cgaatgccgc cacacaacga caatatgtca ctccaatatc 120
ncatcagctg cccaccgct tggttctcac aggactgact cggttacccc cttacaaaac 180
cttcaacaaa ttacaggac gggaacagcg cagggtctctg gtagccaggt tcttacaagg 240
acaatgcaaa aataacacga ggccatcttt ttggtgatgt gaggtataaa ttaaaatgaa 300
aatggcatg ggagtgaatg cctcatgagt taggtttgta cagcgaa 347

<210> 5116

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-G11

<400> 5116

cgggtcgaca cagcggtccg aacacacgtc cggcaagccc tcgcgctagt ggcggccacc 60
gccccacagg tagcggaggc aaagaagaag agagcggcgg agagcggcga agcggcggag 120

gcgaagaaga tccaggacga cttctgctcg acgctgtgcg agggcaagaa ggggacggac 180
 ctggctcgtgt gcaaggagtc ctgcgcgctc tcccagcagt ccaacctggt gctgtacggc 240
 aggatccagt gcaagggcaa gtgcaccgag cagaagggca tcacggcgcc ggccatgaac 300
 gtctgccaag aggagtgcga caacgcgtac gtggtgaagg cggccgaggt caccaatgcc 360
 tgcagcgtca cctgcgcaa tgagaagaac ccgcgcctca gcgagaactg caagaggtcc 420
 tgcacccctc etc 433

<210> 5117

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-G2

<400> 5117

gggtcgaccc acgcgtccat tcgtcatgat gccgctggac accgtcaagg agtgcggcac 60
 cgcgctgcac cgccgcaagg cgggtgcaggc cagcctctcc gcgctcaaga gcgcggggcgt 120
 cgagggcgctc atggtggacg tgtggtgggg catcgccgag cgcgacggcc cgggccggta 180
 caacttcgcg ggctacgcg agtcatgga gatggcgcg aaggccgggc tcaaggcca 240
 ggccgtcatg tccttcacc agtgccggcg caacgtcggc gactccgtca gcatcccgt 300
 gccgcggtgg gccgcggagg agatggagag ggaccaggac ctctgctaca ccgaccagtg 360
 gggccgcccgc aactacgagt acgtctcgct cggctgcgac gccatgcccg 410

<210> 5118

<211> 348

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-G3

<400> 5118

ctccctatag agagtcgtat tacaggctac cgtcagttag tacgtcagcg cgctgcatgg 60
 catcaaggag gtgcaggcca gattctctgc gcgtaatagc gcggggtca aaggcgtcat 120
 ggtggacatc tagttgtgca tcgtcgaacg cgacgggcca tgccggtgga gcttcgctgc 180
 ctgcgctgat ctcatggaga tgggtgtgcat ggccgggctc aacgtccagg ccgtcatgtc 240

cttccaccag tgcggcggca acgtctgcga ctccgtcagc atcacgctgc cgcggtgggc 300
 tgcgacggat atggacaggg accatgacct ctgctacacc gatcagtg 348

<210> 5119
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-G5

<400> 5119

attcgcgggc cgacccacgc gtccagggat ggggagggac gagaggttcc cagtgtggga 60
 ggccgcgctc ggcgctgggg tcgccgccgc cttcgccgct gggctcgtcg gggtttacct 120
 ttccatgccg gactccgact acagcttcct caagctgcc a gtaaatctcc aggaactcca 180
 aatcctcact ggccatcttg agaactatac tagcgactac accctacagg tgttggtagg 240
 ctactgcgcc gtgtacatct tcatgcagac cttcatgata ccaggaacga tattcatgtc 300
 actgcttget ggtgctctgt ttgggcagct ccggggcggtg gccctggtag tcttcgccgc 360
 cactgctggc gcttcttcgt gctatttcct gtcgaagatg attgggaagc cactggtgtt 420
 cacgctg 427

<210> 5120
 <211> 402
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-G6

<400> 5120

gcgggtcgac ccacgcatcc acgacgcgcg ccatggtgac gccggcgag gcgtcgacga 60
 agtcgccgtc gatgaagtcg gtggagaaga cctggagctt gtcgccgagg cccttgggca 120
 agacctcggc gatgaacatc cgcgcgtagc cgtggatccg cctcgtcacg ggccacacgc 180
 acaccaccgg gttgtcgggc ctgggcgtca ccgtgttctc cacccggtac aagaacccgc 240
 ggcccgccac cggcggctgc tgccccagga acttgagggt gctctcgaac ttggtctccg 300
 gcagggtccgt gtcgatccag ttgtccctga ggtacccggc gtcacacagg ggctccccgg 360
 gcccgggcgc cggcgacctg cgcggcttcc acacgcagat ga 402

<210> 5121
 <211> 206
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-G7

<400> 5121

attcgccggt cgaccacgc atccgattat aggtcatcat ctctgtggggg tcatcagatc 60
 tggcggggttg gtggtgtgtt gtaatttgta aagagatcga ttaggggtga tgcgggtggag 120
 gggatactac acactaacia aaccgagttg tatactgtac tactaaacta gagatggtaa 180
 tggtgacgtg attccccgatt tcctgg 206

<210> 5122
 <211> 415
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-G9

<400> 5122

gggtcgaccc acgcgtccga gccacctca acggcctcgt ccgggagccc accgacgcca 60
 agttcctcga gctcaagtcg tggctctcct ccacgctcgg cggcacctcc acctgcgagg 120
 acgctgcaa ggacctgccc aagaccagcg acaaggacga cgtcgtcaac ttcagcctcg 180
 acttcgagaa gctgcagcgc gtcacgctcg acctcatcac cgaggcgtcc ggcaccatgt 240
 ccgcaggcat cgccctgcc aacctcaacg ccggagcgcc ctctacggc gcggcgggcg 300
 ctccgggggg ctccgccgat gccccgcgg gcgcctccga gggcctgcg agcgccagcg 360
 gcccgtctgg tgacgacgcg ccggcgctcg gtgctggtgc cagcgcgctcg gctgc 415

<210> 5123
 <211> 429
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-047-Q1-E1-H11

<400> 5123

gggtcgacac acgcgtccaa aaattcgcat gatgtgggca cgggaccaag atgaacaagg 60

cgttcacgct cgagaagccc atggacctga agaagggcgt gaaccacgtc gccgtcttgg 120
 catcgctgat gggaatgacg gacagtggcg cttacatgga gcaccgtctg gccggcgtgg 180
 acaggggtgca gatcacgggc ctgaacgcgg gcacgctgga cctgacgaat aacggctggg 240
 gccacatcgt cggcctcgtc ggcgagaaga agcagatcta caccgacaag ggcatgggca 300
 gcgtcacctg gaagccggcc gtgaacgaca ggccgctcac ctggtacaag aggcacttcg 360
 acatgccgtc gggagagnga ccggtcgtgc tggacatgag cacgatgggc aagggcatga 420
 tgttcgtca 429

<210> 5124
 <211> 401
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-047-Q1-E1-H3

<400> 5124
 cgggtcgacc cacgcgtccg agacgacgcc ggctgcgcca gcagcgacga ccactaccag 60
 cacgacgtga tcatgctgac gcggacgagg accgggcggg cgttcccgcc gccgatctcc 120
 gtgatcggca agggcgggcg gccgtggctc tgcttgcggg cgcaccgcga cggtaggacgc 180
 ctctgtctgc ggcagatgcg cctgccgtcg cangagctgc tgcagccctg caaggatgac 240
 ggcaggttca agctcctcat gcacccggag gcccgcgccg gcccggtgcgg gggcggcaca 300
 ctgcaagaac ggcaaggga ttagatgctag cgctcttaat tgatcagctg atcagatgat 360
 ctgccgccac gcacacgtcg tcttgatagg gctggctgct a 401

<210> 5125
 <211> 403
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-H5

<400> 5125
 attcgcgggt cgaccacgc gaccagcgaa aggcaaggga cgtaagaagt cgtctaattc 60
 ttggatcgaa ttagacgact tcttcgtcac tctcttcatt accacgctaa cttgtaattc 120

gcaggatcta agcagagact tgatttagtt atggacggat tggtaggcct cttgaaagtt 180
 cgcggtgggcc ggggtatcaa ccttgccctac cgcgacgcaa gaggcagcga tccgtatgtc 240
 gtcctacggc ttggcaagaa gaaactgaag acaagcgtga agaagagatc cgtgaagccc 300
 atatggcaag aggagctaac tctgaccgtc acagattcca gccatccact gatgctggat 360
 gtgttcgaca aggacacctt caccagagac gacgccatgg gag 403

<210> 5126
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-H7

<400> 5126

cgcgggccga cccacgcgtc caggctcgtg tcgctcggca ggtacctggt gatgaagctg 60
 gagcctgggc aggacgacac gttgctctcg gaagcgatca ctgacgccgt cctcgacctg 120
 ttcgacgcgt ggagcgagag cgtcgagagg cctttggtgc gacgggcaaa ggagatctct 180
 tcttggttcc tgcaggaagg aagagaagac acacctctc ctgttccgcc gtctacgcgt 240
 ccttgtgctg ccgaagatgc agatgtgttt tattccttag agaattgaca gagcagcttg 300
 aagcaagaga tcgagacatt atgaaactac gtcggtagag ttcatttacc taacgatgtc 360
 aggaagctga aggcaaaggt ctccacggct ttgtacctga gatttgagtg agag 414

<210> 5127
 <211> 435
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-047-Q1-E1-H9

<400> 5127

cgggtcgaca cacgcgtcca aaccgcttca tgatgcagat ctttgtgaaa accctgactg 60
 gcaagactat caccctcgag gtggagtcgt ctgacaccat tgacaacgtt aaggccaaga 120
 tccaggacaa ggagggcatc ccccagacc agcagcggct catcttcgct ggcaaacagc 180
 ttgaggacgg gcgcacgctt gctgactaca acatccagaa ggagagcacc ctccaccttg 240
 tgctccgcct caggggaggc atgcagatct tcgtgaagac cctgaccggc aagactatca 300

ccctcgaggt ggagtcctcc gacaccattg acaacgtcaa ggccaagatc caggacaagg 360
 agggcatccc tccagaccag cagcgggtca tctttgctgg gaagcagctt gaggacgggc 420
 gcacgcttgc cgact 435

<210> 5128
 <211> 179
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-A1

<400> 5128

taccggtcta gaattcccg ggcgaccac gcgccaccc acgcgtccgc ccacgcgtcc 60
 ggccggttcc cagcccacaa ccctgtcatc tccactggca gagctcacc aattgcagta 120
 acgggcattc atctggaaga gctgaaagaa attacaagag acttcaacag tgatgcctt 179

<210> 5129
 <211> 444
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-A10

<400> 5129

gcgggtcgat acaagcctct atcgtgagtc gtattaacac cagggccgac gacgggcaga 60
 tgtacttcgg cgctcccggc gccccctgcg tggccaagct cgtgaaggte gtcgcagcgc 120
 ggccgtactc tgtgtccatc atggagatca gcgagcccat tttgccggcc gcgttgccct 180
 cccccgtcgc ggcgcccggc cgccgcggca agggtggtta gcgcaagatc aagccatcag 240
 cggcaaccca tgaggattcc aacatgatcc cgcgcaagcc cgtcgaagca gtggtggtgg 300
 gtaagggtta ggtggccaag gataccgtgt ccgagtcacc tgctccaagc cccgcccccg 360
 tctccgcccc ttagttgcgt gttgggcgcc gctgcccgcc ggcccccggc caccatgcgt 420
 cgtgtctgcg cgcgcacgca cgca 444

<210> 5130
 <211> 412
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-A2

<400> 5130

gttgcaacac cctatagtga gtcgtattac gcgccggcc ggttcccagc ccaaaccct 60
gtcatctcca ctggcagagc tcagccaatt gcagtaccgg gcattcatct ggaagagctg 120
aaggaaatta caggcgaact tcagcagtga tgccctcatt ggcgatggct cgtatgccag 180
agtctatddd ggtgtgtgta aagatgggac gaaatctgca gtgaagaagc ttgactccag 240
caaacagcct gatcaagaat tccttgtgca tgtttcagct gtctcaagat tgaagcatga 300
gaatgttgtc caactcgtcg gatactgcgc cgaaaggagc acccgctcc ttgcttatga 360
gtatgcagct aggggatcat tgcattgat cctccatggt aaagacggtg tc 412

<210> 5131

<211> 108

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-048-Q1-E1-A3

<400> 5131

tatagtgagt cgtattaaac acaactgcc agattcangt tctgggtgta aagtatcaga 60
gcaagcttct cgaggtgatt gaagccagt agttgccaga aaattttg 108

<210> 5132

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-A6

<400> 5132

tcgcgggtcg acacacgct ctagactgag acatcctcag gcacgggctg aacagggacc 60
tcagcttcgg agcagaggac cgcgccgaga acatccgcag agtaggggaa gtagcgaagc 120
tgttcgccga cgctggcctc gtctgcatcg ccagcctcat atcgccctac agaagcgacc 180
gaagcgctg tcgcgatctg ctgccaagc actcgtttat cgaggtgttc ctggacgtgc 240
cgcttcaagt gtgcgaagcc agggacccca aaggcctcta caagctcgca cgcgccggca 300
aatcaaagg gttcaccggc atcgacgatc cttacgaacc gccgtcggac tgtgagatag 360

tgatccagtg taaagtcggc gactgccctt cgcctgaatc gatggctggt cacgttgtgt 420

<210> 5133
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-B1

<400> 5133

cgggtcgacc cacgcgtccg ggtggggggt gttcattgcc accaagtgat ttggcctggc 60
agcaggaggg ctcttcggaa taagaatgga tgtggctgta actctgcttc tagaccggtg 120
atggttcagc ttagaagcag gggatcttca tcatcagaat aaaaacgtgt gctgttgtgt 180
tgctgtgtct acgccactag tatttctgtt gttaacttat gttctagctt tgttgtaggt 240
aaactgcgaa cccagagttg cagaaccgt actgctcgtt taagctcatg gtgaactacg 300
agctaaaagg ctgttgccag agtcgatgtc agtatgtcac ttgtcactgg aggtccccgg 360
ttcagttcag atgttgcttt ggcacgtgct attcttttgg a 401

<210> 5134
<211> 409
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-B4

<400> 5134

cacgcgtccg ggaaagctct cttcctctc ctctccctc tcgaaattcc gtctccttgt 60
cccctgtcct cctcccccg tttccccggt ttttagaggg aaagaggagg cggagagagg 120
gatgggaagg acgagagggt cccggtgtgg gaggccgcgc tcggcgccgg agtcgccgcc 180
gccttcgccg ctggactcgt cgggtgtctac ctttccatgc cggactccga ctacagcttc 240
ctcaagttgc cacgtaatct cgaggaactc caaatcctca ctggccacct tgagaactat 300
actagtgact acaccctaca ggtgttggtg ggttattgcg ctgtgtacat cttcatgcag 360
accttcatga tcccagggaac aatattcatg tcaactgcttg ctggtgctc 409

<210> 5135
<211> 381

<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-B5

<400> 5135

cggggtcgacc cacgcgtccg cccacgcgtc cgcctgaaac cagcgtgctg tgccgcccgg 60
gacgatggcg ccgcgccagc cgtgctccc cagtttcttc tacgcggcgt cgtccggcgt 120
caacggcagc agggaggcgc ctccggtggt ggcgggcgcc ccgagcgagc cgctcggcaa 180
gatcgagatg ttctcggccg catactacgc agcgggcgcc ttgggaggcg ccgcgggctg 240
cgggttcacg ccagccgccg tcaagccgct cgacgtcatt aagtgaata gccagatcga 300
cgccgccaag tacaaggaga cctcgtcggc gttcaacgtg gtgattacgg agcacgggct 360
ccggggcctc tacagggggg g 381

<210> 5136
<211> 363
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-B6

<400> 5136

ccacgcgtcc gcccacgcgt ccggtcaact ggagcataac ctttatgtgc ctggctcaaa 60
tacaattgag cactgtctta tctttgttaa aaattacatt gaccttatct cggccaagta 120
cccatattgg aataggacaa aaggagctga tcatttcttt gttgcttgcc atgactgggg 180
gccttacaca acaaaattgc atgatgaatt gcggaagaac actattaaag ctctctgcaa 240
tgcagatctc tctgaaggat tttttatccg tggaaaagat gtttccttc cagaaacatt 300
ccttaggtca ccaagaagac ctctaagaga tattggagga agaccagctg cgagaggac 360
tat 363

<210> 5137
<211> 378
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-B8

<400> 5137

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ctcgcgaaaa taatgaagag ccgcagcatg gcatcatcgg ccgcgctctt ggtgctagcc 120
ctcgcgctag tggcggccac cgccccacag gtagcggagg caaagaagaa gagagcggcg 180
gagagcggcg aggcggcgga ggcgaagaag atccaggacg acttctgctc gacgctgtgc 240
gagggcaaga aggggacgga cctggtcgtg tgcaaggagt cctgcgcgct ctcccagcag 300
tccaacctgg tgctgtacgg caggatccag tgcaagggca agtgcaccga gcagaagggc 360
atcacggcgc cggccatg 378

<210> 5138
<211> 371
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-B9

<400> 5138

gatcgagca attcctctcg aagtcaaagc tggagcccag cagcacagtc aggtgaaaga 60
accagcaata ctggcgcgat ggcacacaac atatgggatt tcttcatgtt cagcccaaag 120
aacagcattt ctgaaacaat tataagctgc acgtgatgtt tagacgcgac cttcttttcc 180
gtatgtacaa gcaagtatcc cgtatcctcc tagacacagt acaaaacat ttaaaacttg 240
gcaacttgct gcggtgtcac atgtaaaaga agggttgtcc aggaaggaaa atataggttg 300
gcaatggcaa gagtctgctg gtccaacaac tccctgcttc tatggacctc cgtgggagcc 360
ttactttgta c 371

<210> 5139
<211> 377
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-053-Q1-E1-C1

<400> 5139

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cgccatcgag caattataat ctcacagaat aataaacatc atggggcaag cctcacggct 120

cgctcctcctc gccgtcgtgg cgctgctgtc cgccggcctc ctcccgcagg cgctgggtaa 180
 ggggtanggga ggcangggac acggtggcgc cgtcaaccgc caggtcgccg gcatctgctc 240
 tcgcacccccg ttcccggagg tgtgcacgtc caccgccggg cggcacgcgt ccaagtaccc 300
 ggtcatcgac aacctggccg tgctgaacat gcagggtggac gcgttcgcca agcgcaccgc 360
 gcaggcgcgc aagcacg 377

<210> 5140
 <211> 431
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C10

<400> 5140

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 ggcaagcagt tcgaggcgag ggtgttcgag atcccggagc agaagggtgtg cgtggcgctc 180
 ctctccaacc acaacaccaa ggacgacgtg acgtgacgt tccggggcca gtcctacttc 240
 gtgccgcgcc actccatcag catcctcgcc gactgcaaga ccgtcgtctt cggcaccag 300
 cacgtgaacg cgcagcacia ccagaggacg ttccacttcg cggaccagac gacgcagaac 360
 aacgtgtggc agatgttcga cgaggagaaa gtgcccgaagt acaagcagtc caagatcagg 420
 ctgcgcaagg c 431

<210> 5141
 <211> 144
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C11

<400> 5141

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 ctgacgctga acctttacaa gcaaggcctg ctctggggga agatatcgac cgccaagggg 120
 ggcaatcagt tcaaggcaag ggtg 144

<210> 5142

<211> 444
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C12

<400> 5142

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catggagcga tcttcacagg gcaccaacat gcagggcagc ctgctgtcac gacgcgcctc 120
agactggctc gcgctgctcg tcatcaagtc eggctagctc ctggtgcacc tctgtctcac 180
gatcctctac gtcgtcgtct ccgtgttctc agtagcctca gtctactctg ctaagcgcaa 240
ctcgtcgacc ttcacgcgcg tggctctcgt agtacctcgc gtctggcgga cgctcgccgc 300
gacgttcata gcggcggttca cgatcttctt cacctagcag gctgtcgccg tgctcgtctt 360
catcggcctc actttttcag cagacaactg ttctgggtcg cgtacctgct cgccttcctc 420
gtcgacgttg cgtatcagct cgga 444

<210> 5143
<211> 463
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C2

<400> 5143

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ggcacggagt ggcgcagagc agacgccgt gaaccattgt agctgtccct gtcgtcgtcg 180
tcgtcaacga acccacacaa ggaaaggatg gagaagaagc cgaccatcct catgaacagg 240
tacgagctcg ggcgcacgct cgggcagggc accttcgcca aggtgtacca cgggcggaac 300
ctcgcgtccg gcgagagcgt ggccatcaag gtcacgcaca aggagaaggt gatgcgcgtc 360
ggcatgatcg accagatcaa gcgcgagatc tccgtcatgc gcctcgtccg ccaacccaac 420
gtcgtgcagc tgcacgaggt gatggcaaca agagcaggat ata 463

<210> 5144
<211> 382
<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C3

<400> 5144

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ccaacaaaaa tgtcgcgcggt cacagctgcg gtgctcttct acatcctcgc cgttgctgcc 120

ctcagcgcggt ccgaggcccc ggcagagtca ccgaatgaag gcagtgcctgc caaggcacct 180

gagtctgcc aagagaactgc tgcccccgct gaagcaccgc aagccgcctc ccccccgctc 240

gccgccgctg ccccatcgcc gtcgtctagg aagtctgggc cagctaccgc gccagccacc 300

gcctctacag ccccttcttc cacggacgag gagttgagcc ctctgccgcc agcatccacc 360

gccgcggcgt cccctgcggc tg 382

<210> 5145

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C5

<400> 5145

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tttcgcctat gatcggtgcc gccgtagtgc tggacaacaa tggcgccgac gcggtctcct 120

gcactgccat ccctagcgta acaataagcc tagaggagaa agaaaatctc aatgggggatg 180

ttcccacgat cacctcggcc gcaagcaacg aggaggaggc gttgttcagt gtcggagaat 240

ccaccaagga cgatggccat cgcttgacga tggaatgcac cactcccgtc tcttccagta 300

gcccttccac tcgcaagaag cgcggggcgt tcagcctctt cagggcgatg ttctgtcct 360

tcggccggag cgacgacagc atgaagaaga cagacgacga caccacgagc cccaaggaga 420

gag 423

<210> 5146

<211> 374

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C6

<400> 5146

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agaagtacaa ggccacgatg gacgccaaga cgcggcaggc tttcgacggc gtggtggccg 120
ccgctacggc agagaagcgg tcccaggcgg tggaggccgt gctgcagcag cagctgaaca 180
tggacgtgtc cctgtccaag gcgacgtctt cgggggacga gaacaactac gtgagcgtgg 240
ccgcgccta cgagaaggcc gcgggcgcgc tcatcgcggc gacgccggac aacaagctcc 300
gcgctatggc gttcgcgttc gacgggcgcg tggcgccgga cccgggcccg tgccccgcgc 360
tcgacaagcc cttc 374

<210> 5147

<211> 369

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-C8

<400> 5147

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gctcgccgcg cccgtccttc ttcctcgctt cgtttccatt ccgtcccgcg ctccaccgcc 120
gccgcgcgat tcagggatgg agatgaagaa gatcgctgc gccgtcctcg tcgcccctc 180
ggcgccacc gtggcgctcg ccgcggaggc tccggctccg gccccacca gcggctcctc 240
cgcgctcgcg cccggcgctg gcgccgccct cggggccgcg gtcgctcctt tcttcggcta 300
ctacattcag tgagccggcc ggggctcccg gaggccgagg aggagacgaa ggcgagagag 360
agtgacatg 369

<210> 5148

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-D10

<400> 5148

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ccctcgtaa taacatcatg gtcgtgggcg ccgtccttgc ggcgctcgtc gccggcgggt 120

cgtgcggggcc cccgaagggtg ccacccgggcc ccaacatcac caccaactac aacggcaagt 180
 gggtcaccgc tagggccacc tggtagggtc agcccaacgg tgccggcgct cctgacaacg 240
 gcggtgcgtg cgggatcaag aacgtgaacc tgccacccta cagcggcatg acggcgtgcg 300
 gcaacgtccc catcttcaag gacggcaagg gctgcgggtc atgctacgaa gtgagatgca 360
 agggaaaaacc tgagtgtctg ggcaatccag tcacggtgta catcactgac atgaactacg 420
 agcctatcgc tccct 435

<210> 5149
 <211> 431
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-053-Q1-E1-D11

<400> 5149

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 tgaggccgcc gtctccacac ccaagggtgc gcccgaggcc actccaatct ccgttgaggt 180
 tgcggtgat gaacaggtag ctgagaagg ggtggtggag gagccggctg cggcggccga 240
 cgttgagcat cagaaggcta atgaggtgct cgctccagag gcggccgctg ccgagcccga 300
 ccacaaggan gaggaagccg tggagaagac cgtcgtcgan gaggagaagc cagcggcagc 360
 agcccatgca gaggaaaagg tcgccaccgc cgccgagaac acgacgacgg tggaggcgaa 420
 gaagaacgcc g 431

<210> 5150
 <211> 432
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-D12

<400> 5150

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 ggtggtcgtc ggtgtggtcg ccacgcgcac ccgctccggc aagaaggccg gcgacaactt 120
 cacggtcccg ggggaggctt cccttgccac gtcgggcaag tcggtcaagt ccctgtgcgc 180

gccaccccta tacaaggagt cgtgcgagaa gacactgtcc cagggcacca atggcaccga 240
 gaacccaag gaggtgttcc acagcgtggc caaggtggcg ctggagtcgg tccagacggc 300
 ggtcgagcag tccaagtcca tcggcgaggc caaggccagc gactccatga ccgagagcgc 360
 gcgcgaggac tgcaagaagc tcctggagga cgccgcccgc gacctgaggg gcatgctcga 420
 gatggccggc gg 432

<210> 5151
 <211> 396
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-D3

<400> 5151

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 tggcgacgag gcggcaggtg tacgcggact tcatcgccca cgaggccatc tcgtcgagcg 120
 tggccgagtt cagctgggac ctcaagttcc cgggcgcgca ggtgctgctg gccgagttca 180
 acatgacctc ggccggcggc gcgcagaact tcaagtcgca ggccggacaac ttctgtgtgc 240
 gcggtgctgc cggacacggc gttccaccag gtgttcatca ccccgggcgg cgtgatccac 300
 ctccgcgacg gcgccaaact gcagtagctg accagcacgg cgttctgctt ggtggtgtac 360
 gcggacctgc tgctgcggac ggggcagacg gtgctg 396

<210> 5152
 <211> 385
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-D5

<400> 5152

ccacgcgtcc ggtcgccgcc gcagctgacc acaacatcat cgaactgaca gggacagaca 60
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 gcgccgagat ctggaccac agcactcgag ccgcggccgt gatgcgggtc actgacgagg 180
 aactgggct ggccgtcaca gacgctgaga ggctcgagat gatcagggat atgctgtcat 240
 acctgtaccg tggacgcaat ctctcacgag gtggcagaca gtcctcgacg actgccagaa 300

ctcatagtgt gagtatgctg caacgtagga atcactatga ccgcgttcac gcaccactat 360
ctcagctcca tccacgacga tctca 385

<210> 5153
<211> 407
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-053-Q1-E1-D6

<400> 5153

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actccgggag caaggcgctg cagttcctgg ggctccatga ccaggacagc acggttcctc 120
ctgtccacac gcaccagctg gatgtggctg ccaatcaaga tgtggctgtg aacctgatca 180
tcacagacta ctgcatgcct ggcatgacag gatatgacct gctcaagaag atcaaggagt 240
cgtcgtctct cagagatata ccggtgggtga tcatgtcttc tgagaacatt cttcaagga 300
tcaatangtg cctggaggaa ggagctgacg agttcttctt aaaacctgtg cggctatcag 360
acatgaacaa gctcaagccc acatactgaa aagcagatgc aacagga 407

<210> 5154
<211> 406
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-053-Q1-E1-D7

<400> 5154

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agcaaagaag agtacgggag ccgagaacta tgtcccatc cagaggacga cgagcgtgcc 120
ggcggcgaga ccaacagaga cgctcaagaa cgaggaacag gaggtcgacg agctgctgat 180
gcagttcgac gagaaggaga gcataagcac ctctctcatt gaggagcacc tgcaagaacg 240
gctccctgac cctgtcgatc tgaaatccgt ggatctcgac agcagcaaga cgacgtcctc 300
ctcctccagt caggaggagt gcaaggatca agaagagaac acgggggaca ttctggagga 360
gaagcgtgac gggaaagaca gcgangacct gagcagcaaa ggcgac 406

<210> 5155
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-D8

<400> 5155

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ccacgcgtcc gaccaacgtg tggctggacc acctctccct ctccaactgc caggacggcc 60
tcatcgacgt catcgccaag tccactggcg tcaccatctc caactgccac ctaccaacc 120
acaacgacgt catgctcttc agctccagcg acaagcatcc cgaggaccag atcatgcaga 180
tcaccgtcgc cttcaaccac ttcggcagag gcctcgtgca gaggatgcca aggtgccgct 240
ggggcttctt ccacgtggtc aacaacgact acacgcactg gtcctgtac gccatcggcg 300
gcagcaaggc cccaccatc atcagccagg gcaaccgcta catcgcgccg cccaaccttg 360
ccgcgaagca ggtcaccaag cagcatgaca cg 392
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<210> 5156
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-D9

<400> 5156

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ccacgcgtcc gccgacgccg gaggccgcca ccgcggcgaa ctacgcgtcg ttgtggtcgc 60
ccaagcgctt catgcagcgc gctgcccgcg ctttcgcgcg cagcaggtcg cgcgcccgcg 120
tcaggacggt caaggacctc gccgaggaac gggcctcagt gctcgccgcc agcaacaagg 180
tctccgatga agcggcgggc gctaccgcgg tgccgcctgc aggtgccagt gccaagacct 240
ccagcagcaa cgatgcccgc gacggcgcca tgggcagcgt gcaggacgag ccgcggcagc 300
agcgccacga tgactatcac cccgagatcg tccccgagaa gatcatacac gaggacgcgt 360
tgccggtcgt tgctgcagag aaggagaccg ccgcgcgcgc cgccgtct 408
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<210> 5157
 <211> 423
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-053-Q1-E1-E1

<400> 5157

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ttggcggtga ctgccccgag ttccgagagt totacaggca ggaactgaag ccatcgttag 120
gtgacattgt atggctcgtg cagggcagtg attcgctctc tactcccttg ctgccgccgg 180
cgctgaggca ggcaaccaac caacgtccat gatttcctct gcataaaaaa atttgcaagt 240
gaattttggc acttatggtt cactaaaaac atgatgttaa acatattgtt actattaagg 300
gtggctggca aatgatttgt cactgtcata nggacgctgt actagtagca taacatttgt 360
gataatatat catcacgggc tcataataga tatgacaatg aaaatgattt ttattganaa 420
aaa 423

<210> 5158
<211> 388
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-E10

<400> 5158

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ccatgggaac acgatcaaag gaatatTTTg accgccatgg agatctgaag cggatacgaa 180
ggctgaaatt gtcatccatt gaacgtgttc tcgttgacaa atacaaaatt tctgaatctg 240
atgcccggga attcgccaat tttctttgcc ctttactcga ctttgcacca gagaagaggc 300
caacagcttt agattgccta aagcatccat ggcttaaaca tgacgaggat aaaacatgtg 360
ggtctcttaa caataatgat gccaagag 388

<210> 5159
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-E11

<400> 5159

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gcgcgggacat caactgccaa tcaacgactg ctacactggg ggtgcaggtg agatgcggag 180
ggggcaagaa ggggtgcctga gaataacaag atggatgctg ctaattaatg gacgtttcag 240
cttgtttgtt tgttcacccc ttccggtttgg cactgatgct tacattgttc tgacattgca 300
attgaaatgt gattggaaca ttcttgatcg ggaactaaca tgaaatgagt ggagggtaga 360
tgctgatcag accaaagatg tgtatttccc cctcttttcc ttctgtctcg tgttgtttca 420
tgtaaccatc ac 432

<210> 5160

<211> 354

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-E12

<400> 5160

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attgttgagc ttgacagctt gaaggtttcc ggtgatgttt ggttcgggtc tggaattgta 120
ctgaagggga aagtgaccat cactgcaaaa cctggcggtca agctagaaat cccagacgga 180
gcagtgattg ggaataagga tatcagtggc cctgaggacc tttagataag aatcagcgaa 240
tcagcaagga ggctcacttc gccaagtggc ggatcatttt tcgtgttttt tttcctgtat 300
attcaaacag gttccatgat attatggaga atattaattg ccagtataat ccag 354

<210> 5161

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-E2

<400> 5161

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tagaaggctg agaggagaag aaggcgagac gtgcagtccg tcgggcaccg atcgagaaca 120

gggaagcaag aggctgctag agatcgagct catcaaccaa ccaagtcgta cgtcgtcagc 180
atcacgaccg gatggcgcggt gccgcgtcca gctatgtatc caggaggggg ctctccgcag 240
cgatgacggt ggcgaggag tccgtgaaga aggtggagga caaggcgggtg aagctgggaa 300
ctgtggccaa ggacatcgcc agcgccatgg ccaccacgac ggacgagaag acggcgttct 360
gggaacctga ccccgagacc ggatactacc gtcgggtcac cggcacg 407

<210> 5162
<211> 360
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-E4

<400> 5162

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caccatagcg cccgctctgt cgccttcgt tcacctctcc ttcctctcgt ccctgcctgc 120
cagggagagg ggaagtcaga ggcacggagt ggcgagagc agacgcccgt gaaccattgt 180
agctgtccct gtggtcgtcg tcgtcaacga acccacacaa ggaaaggatg gagaagaagc 240
cgaccatcct catgaacagg tacgagctcg ggcgacgct cgggcagggc atcttcgcca 300
aggtgtacca cgggccggaa cctcgcgtcc ggcgagagcc tggccatcaa ggtcatcgac 360

<210> 5163
<211> 381
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-E5

<400> 5163

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ccaccatggc gcagcgagcg gtggccacga tgacgactaa taagcccctc ctctcctcg 120
ccctggcgtc cgcgtcctt ggtgcggcgc cggccgcgc gaacgcgccc ggcgggcgct 180
tcagcaactg ggtggcgatg aaccagcaga gctacgcgct gtacgcgcag aagtccgtcg 240
gggacggggg caaggagccc ctggacaaga agctgtcgga ggcgagagaag aagaaggta 300
cgtacgtggt ggaccccagc ggcaaggcg actacaccaa catcaccgcg gcgctggagg 360

atatccccgt gagcaaacac a

381

<210> 5164

<211> 386

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-053-Q1-E1-E6

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ataatcaata caatgtggaa ttcattgaaa ggacggccag ttctgggccg tatataccaa 180

gggaaggagc caccacaatt tgttgctctt ttccagccca tggttatctt gaaggggtgga 240

atcggatctg gatacaagaa gctcatagaa gaaaaaggtg ctatgggtga gacttatact 300

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caagtagatg cngtagcacc gtcttt 386

<210> 5165

<211> 436

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-E9

<400> 5165

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gcccggcggg gcgttcagca actgggtggc gatgaaccag cagagctacg cgctgtacgc 180

gcagaagtcc gtcggggacg ggggcaagga gcccctggac aagaagctgt cggaggcgga 240

gaagaagaag gtcacgtacg tgggtgaccc cagcggcaaa gggcgactac accaacaatca 300

ccgcggcgct ggaggatatc ccggtgagca acaccaagcg cgtgatcctg gatctcaagc 360

ccggcgctca gttccgcgag aagctgttcc tgaacatcag caagccgttc atcacgttcc 420

ggtcggaccc caagaa 436

<210> 5166
 <211> 432
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-053-Q1-E1-F10

<400> 5166

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gctgcagcaa ccggccagtg cgcgcggttg cgttgcatth gcatggctgc gcgctgcgct 120
ctgggagctt gcactagcgg gtcggcgggc taggcgcggg gcatctttcg agtgcgtgcg 180
tgtctgttca agctctgata gtctctccgg cccattcgcc ggaggaaact gaccgccgcc 240
ttctcgtctt cgctctctac cctattcccg gggctgagag gggaggagag aaggccacgt 300
ccacaccata aagcaggacg tacagacacg tgtacgangg ggatcacggt cgggtgaggt 360
gactaagctg gcggacggaa cgccgctcct ctacgacgtc ggaaacccgt tcgctgtgct 420
ctccagcata cc 432
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<210> 5167
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-F11

<400> 5167

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aacggcatca accccaacgg cgggttcctg tcgtacggga acatggagag ctatgcgatg 120
tgggtggcga ccggcgtggc gtcggccttc ttgcgctccc tcgagcgtg ctctgcatac 180
cacctccaca ccgcggagga cgacggcgac gaggaggagg aggacctcga ggaggcccg 240
cgctccttct cccgccgat cctgagtac tactacgacc ggtccggctc ctccgcctcc 300
gtcgccaaga tgtgacctga ccgaaccgcg cctccctccg cccaagaaat gcgtggtgat 360
acgatccgtt tcttgatcta ttatgtgctc ttgcttgatt cgttgagtct ctagccaaga 420
agatgaacaa caac 434
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<210> 5168

<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-F12

<400> 5168

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gcccggtgcat gcgtgttctt cgtcgtgctc ctcttgcccg ccacgcgggt ggcaccgttc 120
gcggggcgccg cacgcgtgga cgttgtggag ggtagggtcca tggcatccgc cgatgcaccg 180
gaggcgggcg ccgatgctcc cgctcctagc cccgactccg cctcatcccc agactcgtca 240
tcggaggcgc cctctagcag cagttcctcc gactagacgc aaaaacctct tcattctctg 300
gaaataacta acagtatata cgttgcaccc tgatgatata gaaacatgta cgtgcatcag 360
tgtatggaat gcgagtggca aacacatgga atgtgcttgc ctaattattg t 411

<210> 5169
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-F2

<400> 5169

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cgatgcgggc cggctgctcc ggcagtcggg ccccttccct tcccttccct gcccgctgcct 120
ggcccttgag cccctgacgc gcgcgcatgc atgtggcgta cccgcccggc ggtggccgtg 180
cgtgccctca tgcattgtgc cgctgcccgc gcgcggagcc ccgcgcgagc cgcacacagg 240
ccacagccga gcgagggagg caggcagagc agcggccagc gctgaagccc acggtggcag 300
caagcagctt gcgcatgtgg cctgtctacc ggccgccggc ccgggtaggc ggcgagccc 360
cgtcgtcgga tggatccgtc ggctttcggg ttcttcagcc gtggagtctc gtgcgcgcgc 420
gggacgggac tc 432

<210> 5170
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-F3

<400> 5170

attcacgggt cgacccacgc gtccgaaaca atgcgatgag agccttggtc ctccctgggtcc 60
tcttctgcat cgtgcatggt gagaaggaag agtcaaaggc catcgatgcg aaagcgtccg 120
ggcctgggtgg gtccttcgac atcaccaagt tgggcgcctc cggcaatggc aagacagaca 180
gcacgaaggc tgtgcaggag gcatgggcat cggcgtgctg cggcactggg aagcagacaa 240
tcctcatacc caagggcgac ttccttgctg gacaactcaa cttcacaggc ccttgcaagg 300
gcgacgtgac catccagggt gatggcaatc tgctggcgac cacggaccta agccagtaca 360
aggaccatgg taattggatc gagattctac gcgtggataa cctgggtcatc aacgg 415

<210> 5171

<211> 408

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-053-Q1-E1-F4

<400> 5171

ggtcgacca cgcgtccgcc acgcgtccga ctccctccac ctcgacgggt acgccttctt 60
cggcgtcggg atggggcctg ggacgtggtc gccggagatg aggaagacgt acaacctact 120
ggacacggtg agccggcaca cgatccagggt gtaccgcggt tcatggacgg cgatcatgct 180
gacattcgac aacgcgggca tgtggagcgt ccggtccaac gtctgggagc ggtactacct 240
cggggagcag ttctacatca gcgtcatctc gccggcgctg tcgctgcgct acgagtacaa 300
catgcccgcg aacgccctcc gctgcggcaa ggtcgtgggg ctgccgctgc cgccatccta 360
cgcccccgcg cgctaaagac gacgaaggcg ccggtnttca cctcgtgt 408

<210> 5172

<211> 425

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-053-Q1-E1-F5

<400> 5172

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gcagctaggg catatgcatt atttcagaag agaactagct actccgatca agatgagcga 120
cgaaggattg tacgtatatt gctgagagga gatcgaagag acggtgatga gttggcggaa 180
gatcgatgca tgcgtggatg atcatcacag ccaatcgtac gtgtgtaaaa ggtcggcccg 240
aggggggaat aatcgtgcat gagacacctc tctcgtcgc tcttcctctc ctacgtctta 300
attcattggg ttcgtcgatc cgagatccta cgtacgtcgt cgtttttgta ttgtatatat 360
tataggtcat catctcgtgn gggtcatcan atctggcccg tttggtggtg tgttgtaatt 420
tgtaa 425

<210> 5173
<211> 373
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-053-Q1-E1-F6
<400> 5173

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gcagcagtag cagcagccgg cgtgtgacgc tgggtactgct cggctctccgc ctgctgcttc 120
tggttgggtg tgcgcaggcg gtagtggagt tgggtgcctgc tgatgataat atcgccgccg 180
ccgctgctgg cacggcgggtg gacgatggcg agccgcctca gcagtgcgcg accccggtga 240
gcgtggagga ggctgtccgc ggcgcggtccg agacgcacgc cggcgtggcc tacgaccact 300
gcatggcgtc gctgggcgcc gaccgcgcga gcaaggaggc cggcaacaag aacatgcacg 360
ggctggcggt gct 373

<210> 5174
<211> 380
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-053-Q1-E1-F7
<400> 5174

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gcaggagaat cccgtcgaat cccctctca accaagggcg cgcgcgcgtg cgtatgcctc 120

ctccagatcc aaagcaacag acagcgaggg ggcaccgggg tccgccgcat gtttgcgatt 180
tatggaggat catgctttct tgcttactac attagctcct gacgcgccgc cctccccctcg 240
cgttcattga tttctgttat aattactacc gagctactat ctccacatta ttattggtaa 300
agaaagaaag ggcgcctcct ctaatttgat gggcattccg tttccttctc aacttcaacg 360
ccaacaacag ttgatgctac 380

<210> 5175

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-F8

<400> 5175

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ctggaagcat gcatccaaac caccaatcat tatgccgttt agaaagggtg aaaactgcaa 120
ccaggttatc aaaatcggca aggagctaaa cttttctctg gtaaagttag caggaaatga 180
tattgtgcaa ggaaacaaga aactgattct agctttcctg tggcaactca tgaggactag 240
tattctacaa ttgctgagga acttgagatc cactctaaa gagaaagaga tgacagatgc 300
tgacattctc atttgggcta atagcaaggt caaggaatca ggcaaaaatt cacatattga 360
aagcttcaag gacaaaacga tagcagatgg ggtgttcttc cttgagctcc taagtgtgtg 420
gc 422

<210> 5176

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-F9

<400> 5176

ccacgcgtcc gcaacgtcat ggactgcacg cttaagaaga cggccaatgg cgtccgcatc 60
aaggcatatg aggacgtgc ctccgtgctc accgcctcca agatccacta tgagaatatc 120
aagatggagg actcgggcta ccccatcatc atcgacatga agtactgcc caacaagtta 180
tgacccgcca atggtgcctc caaagtcacc gtcaaagacg tcaccttcaa gaacatcacc 240

ggcatctcct ccaccccgga ggccgtcaac ctgctctgct ccgccaggat cccatgcacc 300
 ggtgtcacga tggacgacgt caacatcaac tacagtggca ccagcaacaa gaccatggct 360
 gtatgcaaga acgctaacgg cagcgccaaa ggttgctga atgcgctcgc atgc 414

<210> 5177

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-G10

<400> 5177

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 ccctacagct ggtcatgagc gcccgcccaa ccatggcggc ggccggcgccc gtgcgcgcct 120
 ggggtggtggc gctggcgctg gtgctggcgt gcgcgtgct ccagccgcgg ccgtccgacg 180
 ccgcggcgca gcccgccccg cagtcgccgg cgacggcggt gtcgtcgggc gccgccaagc 240
 ccaagtgcgt ggccggcgcc aggaacgacc acgcgtgccg cgtcggcgcc gtgcacgacc 300
 cggacagcca ggaggaggag ggctccagcg tcaccatcga cgcgcccgcc gccgcgcccc 360
 acgacgtcgg ccacgacgac ggcagcgact acaacgaccc cgacgtgccc aacaacgacc 420
 agctcgtcgt cgtc 434

<210> 5178

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-G11

<400> 5178

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 ataacatcat ggtcgtgggc gccgtccttg cggcgctcgt cgccggcggg tcgtgcgggc 120
 cccgaagggt gccacccggc cccaacatca ccaccaacta caacggcaag tggctcaccg 180
 ctacggccac ctggtacggt cagcccaacg gtgccggcgc tcctgacaac tgcggtgcgt 240
 gcgggatcaa gaacgtgaac ctgccaccct acagcggcat gacggcgtgc ggcaacgtca 300
 ccattctcaa ggacggcaag ggctgcagct catgctacga agtgagatgc aaggaaaaac 360

ctgagtgtctc gggcaatcca gtcacggtgt acatcactga catgaactac gagcctatcg 420
ctccctacca c 431

<210> 5179
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-G12

<400> 5179

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gaccgcccgt gccgccggcg atcccgatcc gccgaccgt cccagccccg ctgcgagcca 120
tgtcgccgtc ggagccgacg cgggaggaga gcgtgtacat ggccaagctt gcggagcagg 180
cggagcggta cgaggagatg gtcgagttca tggagcgcgt cgcgcgctac gccggggggcg 240
ccggcgggcg ggaggagctc tcggtggagg agcgcaacct gctgtccgtc gcctacaaga 300
acgtcatcgg cgcccgcagg gcctcgtggc ggatcatctc ctccatcgag cagaaggagg 360
aaggccgcgg gaacgaggcg cagccgcgat ccat 394

<210> 5180
<211> 433
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-053-Q1-E1-G2

<400> 5180

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ccctaccact tcgacttgag cggcaaggcc ttcggctccc tggcaaagcc cgggctcaac 120
gacaagattc gccactgcgg catcatggac gtcgagttca gaagggtgcg atgcaagtac 180
cccgcggggc agaagatcgt gttccacatc gagaagggt gcaaccccaa ctacctggcc 240
gtgctggtga agtatgtggc ggacgacggc gacatcgtgc tgatggaaat ccaggacaag 300
ttgtcggctg agtggaagcc catgaagctc tcttggggcg ccatctggag gatggacact 360
gccaaaggcg tcaaggggcc cttcntcatc cgcctcaaca gcgagtcgg caagaaggtc 420
atcgccaaag acg 433

<210> 5181
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-G3

<400> 5181

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tgctggaagg acgacgacca ccaccctatc tgctttcccg aagactgcgt ggcgacctgc 120
caggatcacg gccacgcgga cggccgctgc aactgggcat ggtcgtggag gccgtattgc 180
cagtgcctgt tggcggactg ccaataggcg cgaacagctg cgtcgcctgg cgtcctggct 240
gcctcgccgg ccgatgaagg atgaacggtt ggggccgatg atcgatgtgt ccgtcggcat 300
gtcgatcact cattgaaacc ccctctaate ctgtgcggtg ttattttcat ggcacctgtg 360
gccattaaag atccatggac acgtacagta ccaatacatg attcttcaca gttcaactat 420
cgatgatact gttcatgg 438

<210> 5182
<211> 415
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-053-Q1-E1-G4

<400> 5182

ggtcgaccca cgcgtccggt tctagatcgc gatctagaac gaagactgca atgtttacac 60
ggggaagcgg ctgcacgcgg ccttgttctt cgtgatggga ttctggctgc tggacttttc 120
caacaacacg gtgcagggcc ccgcacgcgc gctgatggcg gacctcgcag gcagccacgg 180
accagcacg gcgaacgcca tcttcgtgtc gtggatggcg atcggaaca tcttgggcta 240
ctcgtcgggg tccaccgaca agtggcacac ctggttcccg ttctgcaga cgaaggcatg 300
ctgcgaagcg tgcgccaacc tcaaggccgc cttctggtg tccgtggtgt tctgngcct 360
gtccacggtg gtgaccatga tcttcgcccg cgaggtgccg ctggacccgg cggcg 415

<210> 5183

<211> 390
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-060-Q1-E1-D5

<400> 5183

ccacgcgtcc ggcgtcgcac ccgctccaca ggatcctctg cgccaccgca accgtgtgac 60
cgcccgtgcc gccggcgatc ccgatccgcc gaccgcgtccc agccccgctc gcagccatgt 120
cgccgctcga gccgacgcgg gaggagagcg tgtacatggc caagcttgcg gagcaggcgg 180
agcgggtacga ggagatggtc gagttcatgg agcgcgtcgc gcgctacgcc gggggcgccg 240
gcggcnggga cgagctctcg gtggaggagc gcancctgct gtccgtcgcc tacaagaacg 300
tcacgcggcg ccgcagggcc tcgtggcgga tcctctcttc catcgagcag aaggaggaag 360
gccgcgggaa cgaggcgac gcggcatcca 390

<210> 5184
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-D6

<400> 5184

gggtcgaccc acgcgtccaa agtgctcggg caatccagtc acggtgtaca tcaactgacat 60
gaactacgag cctatcgctc cctaccactt cgacttgagc ggcaaggcct tcggtccct 120
ggcaaagccc gggctcaacg acaagattcg ccaactgcggc atcatggacg tcgagttcag 180
aagggtgcga tgcaagtacc ccgccgggca gaagatcgtg ttccacatcg agaagggctg 240
caacccaac tacctggccg tgctggtgaa gtatgtggcg gacgacggcg acatcgtgct 300
gatggaaatc caggacaagt tgcggctga gtggaagccc atgaagctct cttggggcg 360
catctggagg atggacactg ccaaggcgct caagggcccc ttctccatcc gcctcaacag 420
cg 422

<210> 5185
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-D7

<400> 5185

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ggccccgcc ttttccgaca ttcacagggg ggacaggaaa tcagcggcca tggcctcgat 120
tccggcgacg accttcgccg tcatcttata cgtcctcttc tgtgccgcgg ctggcaccgc 180
cgtcgacaac gacctccccg actacgtcat ccagggccgc gtctattgcg acacctgccg 240
cgccgggttc gtgaccaatg tcaccgagta catcgccggc gccaaagtga ggctggagtg 300
caagcatttc ggcaccggca agctcgagcg ctccatcgac ggggtgaccg acgggaacgg 360
cacgtacag atcgagctca aggacagcca cgaggaggac atctgcgagg tggctcttgg 420
gga 423

<210> 5186

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-D8

<400> 5186

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cgccaccggc atcgtgctcg gcacctacat ggccatcatc accgccgtct tcttctacct 120
cgccacgac accgacttct tcacggacgt gttcggcgtg aattcgatca aggagaacga 180
caggagctg atggcggcgc tgtacctcca agtaagcatc atcagccagg cgctcatctt 240
cgtgacgcgg tcccggagct ggtcgttcgt ggagcggccg ggcttctctc tgctcttcgc 300
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ccgcatccag gggatcggct gggcgtgggg cggcgccatc tggatgttca gcatcgtcag 420
ctacatcccc ctcgacgtg 439

<210> 5187

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E1

<400> 5187

gggtcgacgc acgcgtccgc ccacgcgtcc gccacgcgtc cgatcttctc cgatccatca 60
acaatcgccg agagcgatcg agagataaat aaagatgaag aaagtggcat catcgtcagc 120
cgttctcttc gtgctagccc tgacgctagt ttgtgccccg ctgatagcag aggcaaagaa 180
gaagagagtc gccgccgccg ccgccgagga gaagaagggt caggacaact tctgctcgac 240
actgtgagag ggcaggaagg ggatggacct ggtgggtgtg aaggagtcct gcgacctctc 300
acagcgctcc aacctggtgc tgtacggccg gattcagtgc aagggaagt gcaccgagca 360
gaagggcatc accgcgccgc agatgaagggt gtgccaagag gcgtgagac 409

<210> 5188

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E10

<400> 5188

attcacgggt cgaccacgc gtccgaccac cacaagggtg agtcggagga cacgctgtgg 60
aagaagggca tcattctcgg ggagaagtgc aggatcccgg gcgagaggga ggcggagacc 120
ggcgagcccc tcgacccgc cgacgagatc gccgccggca gcttccgccg gtccagctac 180
tccccggccc tgtcgcggtc gagctcgttc gccgtgtacc accaccaaca gcagcagcac 240
cagcacgaca ccccggccgc cttgcatgcc tcggattctt gacagcccct cgagaccgca 300
gtataaatgt ataatactat tacgtacgtg tgtaggcgtc gaaggggaga aggatgctac 360
tatgcctacg ggatgtaatg tgcattcaaa ttcagatgta attgctctat aattctacta 420
ggtgtgtgcc 430

<210> 5189

<211> 374

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E11

<400> 5189

ggtcgaccca cgcgtccgcg caggcccatc ggatccgttt cgagttccac aaggagcag 60

cggagcacac gttcatgagg atcgacgggg agccatggaa gcagcctctc cccaaggagg 120
 acgacaccgt ggtggtggag atctccaacc tccgtcaggt ggccatgctg gccaacgacc 180
 cgtgcaggtc caagagcgtg aacgagccgt cctccccgtc gtgccacggc catgaggacg 240
 acgacagcaa cagcctggag gacgaggacg aggacgagtg ggaggacggg aggaagaagt 300
 tcggtgcggc ggccaccttc aagatccccg acgaggtgga catcgctcat ctcaagttaga 360
 acctaaaaac cccg 374

<210> 5190

<211> 392

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E12

<400> 5190

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 tcccttcggc tcggcaaaca catcaagtcg cgatggagat gaagaaggtc gcctgcgccg 120
 tcctcgccgc cgccgcctcc gccaccgtgg tcctcgccgc cgaggccccg gcgccccgcc 180
 ccaccagcgc ctctcggcc gcgttccccg ccgtcggcgc cgtgctgggc gcctccgtgc 240
 tctccttctt cgcctactac ctgcagtaaa attaaaggag ggtcggaggg agatgctgct 300
 ggctgccatt gcctgtattc gggtggattc cgtttatata tatatttaag tactttaatt 360
 tgggtctgaa catgtcgatt gatccattca tt 392

<210> 5191

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E2

<400> 5191

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 gtcgtcgcca accgtagcaa gaacatcacc accgccagc aataatggcg cagagcatga 120
 ggattgtggc gctggccctg gtggccctgc tgggtgtggc ggccggcggc cccgtggcca 180
 ccgcgtacgg ctgctacgac gactgctacg agcgtcgcgc caacggcaag aaagaccccg 240

cctgcaccaa gatgtgcaac caggcgtgcg gctccacgga tcagggcgcc ggtgccgccc 300
gcgccgccc ggcttgatcg cccagcgcat tcacgcttc agctcgatat aatcgctgct 360
ccgtcagcaa cccacatatg attcgatcaa ttttctctct ctaatttctc gaccccgctcg 420
aatttttttt cct 433

<210> 5192

<211> 417

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-E3

<400> 5192

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tgacangatg tcgtggcaga catacgctga tgagcacctc atgtgcgaga tcgagggcca 120
ccacctgacc tccgctgcca tagtcggcca cgacggcgcc gtttggggccc agagcaccgc 180
attccacag ttcaagacag aggagatgac caacatcatg aaggacttcg acgagcccgg 240
gttcttgccc ccgaccggcc tcttctcctg cccaccaag tacatgggtca tccaaggcga 300
gccccggcgt gtcacccgcg ggaagaaggg atctggaggc ataactgtga agaagacagg 360
gcaagcgatg gtggtcggca tctacgacga gcccaatgac cccggggccag tgcaaca 417

<210> 5193

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E4

<400> 5193

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ctcccccgcc tccccggggcg ggcgctctcc tgttctcctc cctcctgctg ctggtgccag 120
ggccgggagg gcgggcgcgga ggtggcgctc atggggctcg cgggggacgg gtcggcggac 180
accgccaacc tcagtaatag tgaaaatggt cggttcagtt atggagttgc aagttctccc 240
gggaaaagag catcgatgga ggacttctat gaggcaagga tagacgacgt tgacggagag 300

aaagttagaa tgtttggtgt gtatgatggt catggaggag tcagagcagc tgagtacgtt 360
aagcagcatc ttttcagcaa tttaataaaa caccctaaagt tcatcactga ttacaagggc 420
gctattgctg aaactttaca acgcac 446

<210> 5194

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E5

<400> 5194

ccacgcgtcc gggccgctga gcgagcagtc tccaattcc acccaataac taataacatc 60
tcctcgaacg ccaggttcct tggaccacta tatccaggag cgacgaagtg atccaccgcg 120
cagccatgga gatgaagaag gtcctctgcg ccgccctcgt cgcgcgcgcc tcggccaccg 180
ccgtgctggc ctccggtcgcc tccgaggcgc cctccgaggc gcccgccggc gcggccgggtg 240
gtgcggctgg ccctagcgca agcggcgccg ccgcgcgcgc cgtgcccgcg gccggggcg 300
tcgtcgccctc ctctctcgcc tactacctcc actgagcgac gacgcgcggg gcggcaacgt 360
tgggatgcat cgtgtttggt tcatccgatt aattaattgt tttttt 406

<210> 5195

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E6

<400> 5195

ccacgcgtcc gcggacgcgt gggcggacgc gtgggcgcgc ccggccaagc tgccggaggg 60
ccccagcggg tgggcgtggt ccatcaacca gtgcaggtcc ttccgctgga acctgacggc 120
cagcgcggcg cggcccaacc cgcaggggtc gtaccactac ggccagatca acatcaccgc 180
caccatcaag ctgcgccatg gccgcggcaa ggtcgacggc aaggagaggt tcgccttcaa 240
cggcgtgtcg cacgtggacc cggaacccc cgtcaagctc gccgagtact tcaacgccag 300
cgacggcgtg ttcaagtaca acctcatcgg ggacgtgccg ccctccaaca cggccccccac 360
caagatggca cccaacgtca tcagcgccga gttccgcacg ttcattgagg tggctctcga 420

gaaccccgag a

431

<210> 5196

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E7

<400> 5196

ccacgcgtcc ggcagcctcc aataaaagcc agcacatcca aataaaaccg agagacctca 60
gccctcaggc aagccgaccg ccgacgtacc accgcgccaa cccgagagaa agatggagat 120
gatcaagagg atcctcatcg ccgcgctcct cgtagtcgcc gtctcggcca ccgcagtgct 180
ggcctccacc gagggccgcg ccgcgggcgc cccagccgcc tccgagtcgt cggcgctccgc 240
cgaagcccc gctggcgccg ccggcgccgg cgccggcacc ggcaccgcgc cggggccctc 300
cgccagcggc gccgcgccg ccctcgccgc cgccgccgcc gcgctcctct tctccctcct 360
cgcctactac ctgcactaag cggacggacg gacggacgcg cgcattggcat tggcatgcat 420
ggactgttga acat 434

<210> 5197

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E8

<400> 5197

ccacgcgtcc gcttctctcc cgtccccacc cacatgccct gcttcgccc cgccccgccc 60
tgcccaagct gagttcccc accccaaca aacaattact agagtagctg cattggcggg 120
gaaattaaag cgctagaagc tcagcagcaa tggcggagca ggcgggcgct ggaaggtact 180
ggtgccacat gtgcgccgcg gccgttagcc ccgcggaggg cgaggtggag atgaagtgcc 240
cgttctgcca cagcggcttc ctcgaggaga tggagaccgc ccgcggggcc gcgaccgacg 300
acggtgacgg cgacggcgcg gtggctcagg tgcaccccg cgccgaccgc ccgagctcca 360
tctgggcgca cgctatcctc agcacggtcg acagctccgc ccgtcgccgc cgcaaccggg 420
gggagcagga 430

<210> 5198
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-E9

<400> 5198

attctagggg cgaccacgc gtccgacgga atgggggtgga agtatccgag gtagtattgg 60
 aagaggcaga cgtgtccaaa gccattcgag gttacatcac tgcaaacaag atccagagca 120
 ttgcgctcgg cggagccaac agaaatgcgt gcaccaagaa attcaagaac gcggacgtgc 180
 cgtcgaccct gatgaagtgc gctccagact actgcaacat ctacgtcgtg ggcaagggca 240
 agtccgtcaa tgtcaggctc gccagtgcg gcgtcccgcc gatgcacact ggccgacgaca 300
 tcgcttcgga caccgactca ctccgggaat cgggtgctcta catgacgacgc ggctccagtgc 360
 gggcactgcc gcgggtgacg ccatgacgcc tggcgctcca ttgacaggcg cacaccgc 418

<210> 5199
 <211> 424
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-F10

<400> 5199

attcacgggt cgaccacgc gtccggtgaa ccagcagcct ccaataaaag ccagcacatc 60
 caaataaaac cgagagacct cagccctcag gcaagccgac cgccgacgta ccaccgcgcc 120
 aacccgagag aaagatggag atgatcaaga ggatcctcat cgccgcgctc ctcgtagtcg 180
 ccgtctcggc caccgcagtg ctggcctcca ccgaggccgc cgccgccggc gcccagccg 240
 cctccgagtc gtccggctcc gccgaagccc ccgctggcgc cgccggcgcc ggccgcccga 300
 ccggcaccgc cgccggggccc tccgccagcg gcgccgcgcc cgccctcgcc gccgcgcccc 360
 ccgcgctcct cttctccctc ctgcctact acctgacta agcggacgga cggacggacg 420
 cgcg 424

<210> 5200
 <211> 436
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-F11

<400> 5200

tagccgtcca aaattctagg gtcgaccac gcgtccgcac accttctata acgaactccg 60
tggtgcgct gaagagcacc ctgtgctgct gaccgaagcc cactcaacc caaaggctaa 120
caaggagaag atgacccaaa tcatgtttga gactttcaat gttcctgcca tgtatgtcgc 180
catccaggct gtgctttccc tgtacgccag tggacgtaca actggtattg tattggactc 240
tggtgatggt gtcagccaca cagtgccaat ctatgaaggt tatgcccttc ctcatgccat 300
cctgcgctt gaccttgctg ggcgtgacct gactgacagc ctgatgaaga tcctcactga 360
gagaggttac tccttcacca cctctgctga acgcanatt gtaagagaca tcaaggaaaa 420
gcttgcatat gtggct 436

<210> 5201

<211> 435

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-F12

<400> 5201

attctagggc cgaccgacgc gtccgacacg cgaccgctgc agttcaacct ctgacagatg 60
cagctaagga ttttctcgct gtaaagtaca aggatttgat taagttccaa gatgaagtga 120
tgaacatccc tcgtgctgga atcgaagcca tcttgtcaag taatgacctc caggtggcat 180
ctgaagatac catctatgac ttcttactca gatgggccccg tgcacaatac ccgaaatcag 240
aagagagacg tgaggtcctt agttctcggc tgctccctct tgtgcgattc agtcatatga 300
cgtgtangaa gctgcggaag gtcctagcct gcacagatat agaccacgag caagcaacca 360
agtgtgtcac cgaggctctt ctgttcaaag ctgatgcacc acaccggcaa cgagctcttg 420
cagcggacgc aataa 435

<210> 5202

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-F2

<400> 5202

cgggtcgacg cacgcgtccg accacgcctc cgggggcaag gccaaagttca agggccaaaa 60
gaaaatacaa gaaccgggtg attcaatcaa aaagaaagga taacctggca aaaccttgaa 120
acaagtgggc cccaagggtg ccaagttctt tcaaggaaaa ggaccggttc caacggctga 180
tgccacgctc gtcacgacgc taggcttctt cacggcgatg ccgctgacc caccggcccc 240
tgccgctcca ccacctgccg ccgccccgga gtcgaaggaa gacaaagaat cggaccattc 300
agactcctcg tcatcttctt cttcagacga cgacgaagat aacgaggagg aggaaaccga 360
ggagcaatga taagggcggg tgtgttcaac ttcgaaggct tcaaacg 407

<210> 5203

<211> 427

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-F3

<400> 5203

gggtcgacgc acgcgtccgg tggacgtgaa gccggcgtag gggcccttgg tgacgggcat 60
cttcgtgggc ggggagcgcc tggacatcnc gcaggagatc tgggatgccg agaagtggt 120
cggcggcggc gtcacctctg acacgagcac gtcggtgacg tcgctggtgc cggaggcgta 180
cgcggcggtg acgagcgcat tggacaggca cctgtcccac ctgcccgggg tgtacgagct 240
ggacggcttc gactactgct acaggtggac cttcgccggc gacggcgtgg acctggcgca 300
caacgtgacg gtgccaggt tgacggtgga gatggccggg ggcgcgaggc tagagccgga 360
agccaagagc gtggtgatgc cggaggtagt gcccggggtg gcgtgcctgg cctttaagaa 420
gctgccg 427

<210> 5204

<211> 418

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-F4

<400> 5204

gggtcgaccc acgcgtccgg ccatcagcgt ggtcagccgc tctcatccc ggtcccgtcc 60
aacaaccccc cgccggaaaa caacaacgtg gtgctcatcg gagactggta caccaaggac 120
cacaagggtgc tagcccgcca gattcgacgc cggcaagggc gtgggcccgc ccgcgggcgt 180
gctcatcaac ggcaagggcg gcaaggacct ggaggccgcg cctgccttca ctttcgaggc 240
cggcaagacg taccgcctcc gcgtctgcaa caccgggatc aaggcgtcgc tcaacttccg 300
catccagggc cactacatga agctggtcga gctggagggc tcccacaccc tgcagaacac 360
gtacgactcg ctgcacgtcc acgtcggncat ctgcctctcc gtgctcgtcg acgccgac 418

<210> 5205

<211> 424

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-F5

<400> 5205

ccacgcgtcc gggaagcgtg ggccggggcc gggaggagcg gtacgtgctc cccttcgacc 60
ccaccacgga gttccaccgc tactccatcc tgtggacgcc cgccgccgtg gccttctacg 120
tggacgacgt gccgggtgcgc gaggtgcggc agtcggccgc catgggcggg gacttccctt 180
ccaagcccat gtccgtgtac gccaccgtgt gggacgcctc cacctgggcc accgccgggg 240
gccggtaccg cgtcaactac cgctacgggc ctttcgtcgc ctcttcacc gacctggccc 300
tctcggctg ccgcgttgac gggcccatcc agcagacgac ggcggagcgg tgcgccgcag 360
ccgccgaggc actcanggcg tcggacgtgg ccgtcatgac ggtggagaag cagcaagcca 420
tgcg 424

<210> 5206

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-F6

<400> 5206

ccacgcgtcc gccacgcgt ccgcccacgc gtccgcccac gcgtccgcca acaattaagc 60
ctccccgacc gccacatcta ttaggtgcag ccatgggtgc ctgtgcaacg aagcctaaga 120
cgcttgaggg gaaagcccca gctgaggcca ccatctccac acccaagggt gcacctgaga 180
ccactaccat ccacattgag gttgcggcaa aacatgcagt agttgagaag gtggaggagg 240
acaaggagga ggcactaaca gtggggcgga aacaagagcc agcagccacc attgagcctc 300
agcagattgc tagtgagggt accacttcgg aagtggcggc cgctcgttgc gagcctgaga 360
acaaagagga ggaggaagtt gtggagaaga ccgtcatcga gaaggagaag catcagcag 419

<210> 5207

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-F7

<400> 5207

ccacgcgtcc gcggcccttt tttttttttt tttttggaac aaatacatag agttactcaa 60
tatatataac tcataatttc aatgaattct taattaaatg aaaaatgaat gcaagcattc 120
cctgcatgcg atggcacctc acgctggggc tgcatgcgtg gttcatatca tgtttgcaag 180
agccatgcag ttgttgacca tctggttgag ctcttgtca aacttcccca tggggttggg 240
gacgccggcc tgggtgaagg ggcggtcgca cgagtcgaag tcctggacgg cgagctgcag 300
catgatcttg gcggtgccgg tgtccttgaa cgtgatggcc cgctgcgccg cgccgatggt 360
gtcctgcgtg ttcatgtaca tgggtgctga gaacgtgagc gcctgcgtct gctgcggcgg 420
gatggtgcgg gc 432

<210> 5208

<211> 392

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-F9

<400> 5208

attctagggc cgaccacgc gtccgcggac gcgtggggga tccccccaca ccttgagacc 60

tgcgttgtca cccacccatc aaggttgggg cgcgcagcag gttcagccgt tectgttctt 120
 gctaaaacga gagaaggatg gcagtgtctc anggagctgt cctattcttg tttctcctcg 180
 tcgcagcaga ggtgggaacc atcgatgcc aatgggagt agccatgcc atgcatgcct 240
 tgataatgga gaaagcgaaa cagcaggaga cggagaagaa ggaggagaaa agcacggaga 300
 aggaagagag tcaatgctta tcgccgagtc tccagttcga gggcttctgc ttcaacagcg 360
 acagatgcgc cgatgtgtgc atgaaggaga gc 392

<210> 5209

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-G10

<400> 5209

attcacgggt cgacccacgc gtccgcccac gcgtccgctc tectcgcccc gctctagacg 60
 atcgatggcc gcgacggcgg cggaggagat ggagaggatg gtggaggcgg agtgggagga 120
 ggggatgagg aagaggaagc ggtacgggct ggtggagtac cgggcgctgc cggcttacct 180
 gcgggacaac gagtacatcc accgccacta ccgctgcgag tggccgctcc cgcaggttct 240
 gctctccgcc ttctccatcc acaacgagac cctcaacgctc tggacgcctc ttataggatt 300
 tttcatcttt ctgcctctga ccatatacac agcaacacaa gttccaaatg cagtagatat 360
 ccggagcttg cagcatttgc cagatgtact gagaaaggct gatatt 406

<210> 5210

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-G11

<400> 5210

ggtcgacca cgcgtccgac cagcgtccg cggacgcgtg ggcggacgcg tggggcaacc 60
 gtgtgccttt tggagacgcg atgtcgtccg gcaacaagat cagcgtggcc ttgctgagcg 120
 tggccctagt gggcctgctc ctctgccacc tcgccaccac cgctccgcc caccagaaag 180
 acatccacgt cctcggcagc gtcgacggct ccagcgacgg cagcagcccc gagtccgaag 240

gccgcgtcgt ctacgcggac atgaagctgg ctgatacggg atccgatgcg ccggcgccgg 300
 cgccggcgcc ggggccgtcg tccggttgaa ctgagaagcg tgcgtccagc caagcaaggt 360
 ggtcaaaacc gagaactaat taagggtcgc atcgtgtgtc aggctactac tgttcatgcc 420
 ataattatat atagatacg 439

<210> 5211

<211> 376

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-G12

<400> 5211

gtcgaccac gcgtctagat gtaataatca tgaataacca gtgggagatg ttctcagaaa 60
 cgatcccaaa gtatcgtgat actaaagtca ggacaaagga acccctagag caatattacc 120
 aaaccaagga cgatactgac tacttatggt acaccacaag cttttcgttt gagtccgacg 180
 atttgccctt ttagaaatga catccggcct gtgcttcaag tcaaaagtag tgcacacgca 240
 atgatgggat ttgctaata tgccttcgta ngatgcgcgc gcggaaacaa gcaagtgaag 300
 ggtttcatgt ttgaaaaacc ggttgatctg aaagtangtg tgaaccatgt cgtattgctg 360
 tcgtcaacta tgggaa 376

<210> 5212

<211> 428

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-060-Q1-E1-G3

<400> 5212

ccacgcgtcc gctccgactt cacaaccttt aacaacctcc tgtctcagac gaagctcgcg 60
 gaggatatca accgccggca gaccatcacc gtgctcgccg tggacaacgg cgccgccggt 120
 ggcatctcct cctcccatc agacgtccag cggaagggtgc tctccatgca cgttgtcctc 180
 gactactacg acaccgccaa gctggaggcc atcaagaacc actccgccct gctgacgact 240
 atgttccagt cctccggcca ggccaccgac cgcattgggt tcttcaactt caccaagcgc 300

tccgacggtg tcatggtgtt cggctccgct cagcccggag cgcagatgac ctcccatatg 360
 gtcaagtccg tcacttcnecg cccgtacaac atctcagtgc tgcaggtcag cgcccccatc 420
 gtgccgcc 428

<210> 5213
 <211> 435
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-G6

<400> 5213

ccacgcgtcc gaccacgcgt ccgctttcgt tcctctgttc ctcaacctga ctgcatctgt 60
 gcggcgctac aaccagtttg aaaccagtc tgctgctagc atggcacctc gtgtggaccc 120
 tctgcaagct gtgcagactc ctgttgatga catgatgcgt catgcgtatg ttgacccaaa 180
 cgatcctacc aagatcttcc ttcagcaacc tgcgccagaa tgcgagctga ggaggaggaa 240
 ctaccacggc ccagctgatg caaattagcg cttggctgga ttggcagaac tcatgctcaa 300
 ttaagtgtcg tgtccatttt agcatttcac ctatccttgt cgtttaccac aactgacttc 360
 catattcggg taccctgtt tcctgtgacc ttacatatat aggacataat gttgcgagtt 420
 ctcgcaatat ggtat 435

<210> 5214
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-G7

<400> 5214

ccacgcgtcc ggaacctcct cgctcctcc attgaccaac aattaagcct ccccgaccgc 60
 cacatctatt aggtgcagcc atgggtgcct gtgcaacgaa gcctaagacg cttgagggga 120
 aagccccagc tgaggccacc atctccacac ccaaggttgc acctgagacc actaccatcc 180
 acattgaggt tgcggcaaaa catgcagtag ttgagaaggt ggaggaggac aaggaggagg 240
 cactaacagt ggcggcgaaa caagagccag cagccaccat tgagcctcag cagattgcta 300
 gtgaggtgac cacttcggaa gtggcggtcg tcgttgcga gcctgagaac aaagaggagg 360

aggaagttgt ggagaagacc gtcacgcaga aggagaacca tcagcagtc atgcagagga 420
 aaatattgcc accaac 436

<210> 5215
 <211> 400
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-G8

<400> 5215

ccgggtcgac ccacgcgtcc gtcaccttct ccgatccatc aacaatcgcc gagagcgatc 60
 gagagataaa taaagatgaa gaaagtggca tcacgcgcag ccgttctctt cgtgctagcc 120
 ctgacgctag tttgtgcccc gctgatagca gaggcaaaga agaagagagt cgccgccgcc 180
 gccgccgagg agaagaaggt gcaggacaac ttctgctcga cgctgtgcga gggcaggaag 240
 gggatggacc tgggtggtgtg caaggagtcc tgcgacctct cacagcgctc caacctggtg 300
 ctgtacggcc ggatccagtg caagggcaag tgcaccgagc agaagggcat caccgcgccg 360
 cagatgaagg tgtgcccaaga ggcgtgcgac aaggactacg 400

<210> 5216
 <211> 401
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-G9

<400> 5216

cgcccgaggt gcaagcccag cgcggcgggc ctggtggtga cggcgaccga cctgtgcccc 60
 cccaacgacc agcagtcgcg ggacagcggc ggggtggtgca acccgccgcg ggagcacttc 120
 gacctcagca tgcccgcggt cctccagatc gcgcaggaga aggccggcat cgtgccccatc 180
 tcctaccgca ggggtggcgtg cacgaagcag ggcggcattc ggtacaccat caccgggaac 240
 aagtacttca acatggtgac gatcaccaac gtgggcggcg ccggcgacat cgcggcagtg 300
 tcggtgaagg ggagcaagcg cgttaagtgg acggagatga atcgcaactg ggggcaagtg 360
 tggcagaccg gggaggacct cacatgcgaa tcgctgacgt t 401

<210> 5217

<211> 438
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-060-Q1-E1-H3

<400> 5217

ccacgcgtcc gccacgcgt ccgcggaaggc gtggggcgatc accaatgtgg gcggcgccgg 60
cgacatcccc gcggtgtcng tgaaggggag caagcgtgtc aagtggacgg agatgaagcg 120
caactggggg caagtgtggc agaccgggga ggacctcacc tgcgagtcgc tgacgttccg 180
ggtgatgacc agcgaccacc gcaaggccac ctcatggcac gttctccccg ctgactggaa 240
gttcggtgtc acgtaccagg catccanaga acttctaagt agccactttt cctcctcttc 300
ttcaacctgc atatgccac aagcaaccat gcagatgata acatgcatca tgcagcata 360
ttcattcttt cgctcatgca ttccgatatg gtgccggagt taanaaaatg taaatcaatg 420
tgcaaactca aatgacat 438

<210> 5218
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-060-Q1-E1-H6

<400> 5218

ccacgcgtcc agccggccgg gcggcaccgc catcggagta cgtacacacg tctgtgtgtc 60
ccgcatgcca ccggccgggg gagaaaacca acagccaagc caagcccaca ttgtttccgc 120
agctaggtag aggggcaaag gaggagtata gcggagaggt tgatgcgtga cggaggaggc 180
gcatggacg tcgacatgca agcccgcggt ggcggtgcta gccatggcgg cgaacttgac 240
gacgacggca aggagaagag gacagggacg gtgtggacgg cgtcggcgca catcatcacg 300
gcggtgatcg ggtccggcgt gctgtcgctg gcgtgggcga tggcccagct gggctgggtg 360
gccgggcctg tgatcctgct gctcttcgcg gccatcacct actacacctc ctgcctcttc 420
aacgactgcc tacgc 435

<210> 5219
<211> 425

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-060-Q1-E1-H7

 <400> 5219

 ccacgcatcc gctgctcgcc acgcccctcg cagacggagc ttccgaggca gaggcggcgg 60
 gcctcgcgca gggcgcgctc gaggcggcgg cgccggacgc gggcgcgga cgcagcagc 120
 agcacctcct gccgcggccc ctggtcatcg agctcccgtc gtcgcggggc gaggcagagg 180
 acgagcccgg cgccgacgcc gtgccgccgg acgtgcgctg cgccagctgg cggctggcgg 240
 cggaggccaa caacctcgcg ccgtggaggg cgggtgccgc ggagtgcgcg ccgcacgtgc 300
 gggactacgt caccggcgtc gcctaccgct ccgacctcga cctcgtggcg cgggagtcgc 360
 ccgcctacgc gcgcgccgct gcgcgcgctg gggccgacgg gcgcgacgcc tgggtcttcg 420
 acgtc 425

<210> 5220
 <211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-060-Q1-E1-H8

 <400> 5220

 gccgggtcga cccacgcgtc cgatcaggct ggagcagctg gacgtgtcgc ggaaccagct 60
 cgccggcgcc gtggcggaga acgtgtgcaa gctcccggtc ctgcgcaact tcagcttcgc 120
 gcacaacttc ttcagcgctg aggcagaggc gtgcgtgccg tccgaggact cgccggtggc 180
 gctggacgat agcggcaact gcctcgatgg cggacgcccg gggcagaagc cgttgccctga 240
 gtgcgcgctt gtgctcgcg cccccgtcga ctgccgcacg aacgtctgtt ccaagatgcc 300
 tgcgccacca gcgaagaagg ttcctaggcc accagacgtt agtccacatc cgttgccacc 360
 agcgccatca ccggggagaac aaccacaaa gaagtcccca gcaccacagc cagtgaagccc 420
 aaaag 425

<210> 5221
 <211> 371
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-A1

<400> 5221

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gccccagccc cagaccaacg acgagaaagg acaatctgcg gcggacctac ccgaagtcgg 120
aggcagggca aaaggcccga tccccctcc ccgcgggttg ccgcgctcgt gccacggtgc 180
gctagccccg tcgacgccgg cggacagcgt gcactatggg ttgctcctcc tccgtgccag 240
ctacaaatac tggagggctg aacactatca gcaacgatag ctctccagcc atcagttcaa 300
aggacttgcg tgctaagttg gtattgctgg gagactcagg tgttgggaaa agttgcattg 360
ttcctcgttt t 371

<210> 5222

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-A10

<400> 5222

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tgggtggcagc gggaattctg tagggcaaac gaaaagcaac caaatgagct ggtcaaacac 120
gtctaatacta atgggcacga actcaactga cagctatttg aatcagagca ttgcagctct 180
aggtttcgga aatccaaatg gaggattgag cacagggtctc tccaatccaa gtagttccag 240
tacaggcctg agcatgatgc aacaaaaatc tgattctgga tcaactgtcga cgtcgggtcaa 300
caatgccgca catgggctgc taagacttgc ccctcctcca tccacatcgg ttggaagagg 360
gcgcggtaga aatcaaggac agtccgcact ctcccagagca acaaggcctc atgccaaactc 420
ggcatcagga caacaacct 439

<210> 5223

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-A2

<400> 5223

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 gacagacctg caccgccgtc gtcaagaagg gcgaccacag aggccataca gtggccgtca 120
 tgatcatctc taaagctaac atgacatccg gcatttccag tgcagatgtt cgtatggacg 180
 tcaagatttt gaaatcccta tcagggcaac ataatctcgt catattccat gatgcatgtg 240
 attgaccctt caatgtctac aatgtcatag tactaagtgc aggtgaagac ttgctagaca 300
 gaattttacc aaaatgtggg agatatccat gggaatatgc catagctatc attgtacaga 360
 ttttgagcgt acaggccttc agtcatcatc atggagtaat gcatcgtgat ttgaagccag 420
 agaattttct cgtcaca 437

<210> 5224
 <211> 429
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-061-Q1-E1-A4

 <400> 5224

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 cttangtgac ggctccaaga agtccatcgt caccggcaag aagagcttcg cgcacgggat 120
 cacgactttc aagacagcaa ccttcactgc gcaaggcgac ggggttcattg cgatcgggat 180
 ggggttccag aacacggccg gcgcggagaa gcaccaggcg gttgcgctgc tggatgcagtc 240
 ggacaagtcc atcttcctca actgcaagat ggacgggttc caggacacgc tgtacgcgca 300
 ctccaaggcg cagttctacc gcaactgcat catctccggc acggtggact tcatcttcgg 360
 cgacgcggcg gcggtgttcc agaactgcat cctggtgctg cggcggccca tggacaacca 420
 gcagaacat 429

<210> 5225
 <211> 428
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-061-Q1-E1-A5

 <400> 5225

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tcgacgctct ggtgcagcag ctccgccaga acgacgcggg acggcacggg acgccgccgg 120
ccaagaagga ggccgtggag gcaatgccga ccgtggaaat cgccggtggc aatggcaacg 180
atgacgacac ggccagctgc cccgtctgcc tggaggacta cgcggccggc gagcgcgctc 240
gggagatgcc ctgcaggcac aggttccact ccaattgcat cgttccgtgg ctcgagatgc 300
acagctcctg ccctgtctgc cggttccagc tgccggccac cgacgacaag ggctcatgca 360
gcagcggcga cggtggtttt gtcagtgtcg acgcggatgg tgaaggcaat gacaacggcg 420
gcggcgat 428

<210> 5226
<211> 409
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-061-Q1-E1-A6
<400> 5226

ccacgcgtcc ggccatgacc ttgagcaggc caccatgctg gcctctgact gcctaacaac 60
cagatggtgt gattctctgt cgccatgtga tacgtgacgg aacagtcgag gtagaggagg 120
aggatgcacg gccggcattc tctctcttcc tgttgaccg ccgtttatta atccctaact 180
tttcatccct ttctatcagg ccctctact agcctcaata ttgctagtcg ttgccgttgt 240
ggcgtagatc taacagtact attggttaata aatttgtaat acattgaggt cgatgataat 300
atatatatat atattatata gtcgttgtgc actaatattt tattaaatat ttatgtgccg 360
tcgtaatgac gggcacttta ctagtaacaa attaacacac gtctttgtg 409

<210> 5227
<211> 109
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-061-Q1-E1-A7
<400> 5227

acaactccct aaagtgagtc gtattaaggc aggtggtaag gtggagggtg ccgacatgcg 60
acactgtgat actcacgagt cgccaagtac tccgtgggcg gacagtcca 109

<210> 5228
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-B10

<400> 5228

ccacgcgtcc ggcattgctt cgggtgggtcca ccatggcgca gcgagcgggtg gccacgatga 60
cgactaataa gccctcctc ctccctcgccc tggcggtccgc gtcctctggt gcggcgccgg 120
ccgcgcgaa cgcgcccggc gggggcgttca gcaactgggt ggcgatgaac cagcagagct 180
acgcgctgta cgcgcagaag tccgtcgggg acgggggcaa ggagcccctg gacaagaagc 240
tgtcggaggc ggagaagaag aagggtcacgt acgtggtgga cccagcggc aagggcgact 300
acaccaacat caccgcggcg ctggaggata tcccgtgag caacaccaag cgcgtgatcc 360
tggatctcaa gcccggcgt cagttccgcg agaagctgtt cctgaacatc agcaagccgt 420
tcac 425

<210> 5229
<211> 133
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-B11

<400> 5229

cgacccacgc gtccgaaatg agtcgtatta aaaaaaaaaa aaaaaggga gaagaacaaa 60
aagagaaaaa aaaataaata aacaagaaag aaaaaatcaa aaatcaacaa aaaagggtcaa 120
aaaaaatgca att 133

<210> 5230
<211> 250
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-B2

<400> 5230

cacgggtcga cacacgctc tacacacgac tctctgaact gagccacgcc cttctttata 60

tgtatatata tgcataaagc ggattatatt ggactgttgt actgtgtact agcttggtta 120
 ttccatgact aacatattgt tatattgact ggggtgtgtt tactgaaaag aatggatggc 180
 gcccgacaag cccaaccca acgagctcac cagcaccatc ataaaggggg gccgctctaa 240
 aggatcgaat 250

<210> 5231
 <211> 384
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-061-Q1-E1-B3

<400> 5231

cacgcgtctg gctcaacatc agccagctcg cgaaaataat gaagagccgc agcatggcat 60
 catcgccgc gctcttggtg ctagccctcg cgctagtggc ggccaccgcc ccacaggtag 120
 cggaggcaaa gaagaagaga gcggcggaga gcggcgaggg ggccggaggcg aagaagatcc 180
 aggacgactt ctgctcgacg ctgtgcgagg gcaagaaggg gacggacctg gtcgtgtgca 240
 aggagtcctg cgcgctctcc cagcagtcca acctgggtgt gtacggcagg atccagtgca 300
 agggcaagtg caccgagcag aagggcacat cggcgccggc catgaaggtc tgccangagg 360
 agtgcgacaa ggcgtacgtg gtga 384

<210> 5232
 <211> 386
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-B5

<400> 5232

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 catcgatcat gaggcgtctc cgacggagct aaaagagacc gatcagttag cggtgggtgga 120
 ttgaagaatc gagggcgagg aggaagacag ggaggatgga ggaggtggag cagcagctga 180
 ccaagaaaca gatcgaggag ttccgggagg cgttcagcct cttcgacaaa gatggcgacg 240
 ggacgatcac gaccaaggag ctgggcacgg tgatgcggtc gctggggcag acgccgacgg 300
 aggaggagct gcaaggcatg gtggacgaag tggacgcgga cggcagcggc gccatcgact 360

tccaggagtt tctcacctga tggcgc

386

<210> 5233
<211> 450
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-004-Q1-E1-C8

<400> 5233

ccacgcgtcc aaccagtgcg tgtgctcatc cgtgcacgcc ggcaatggtg tectccgccc 60
gtgcgctcat cggcctcctc gtcgccgcgg cctccctcgc cgtcgcgctc tcggatggcg 120
gcgggatggc ggccgcggtg tacgggtacg cggcggggag cccaacggg cgggagaact 180
gggggaagct gagccccgcg tacaagctgt gcggggaggg gaagcagcag tcgccgatcg 240
acatcgtcac caagcaggcc gtcnccgccg ccacctcga caccctcaac cgcacctacg 300
gcgccaccaa cgccacgctc atcaacgacg gccacgacat cacgctggcg ctcgagggca 360
aggttgggac ggtgacggtg aacggcaagg cgtacagctt cgagaagctg cactggcact 420
cgccctccga ccacaccatc aacggccaga 450

<210> 5234
<211> 439
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-004-Q1-E1-C9

<400> 5234

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catgcgcata ctcgccaccg cgctcggcag cgaggagaaa gccaagcggg cgctgatcta 120
cagctacaag gccgccgcta gcgggttcgc cgccaagctc acgccggcgc aggtcgccgc 180
gttgcagaag catcctgacg ttgtgcaggc gctgcctgac gtgaagtaca cccttgagga 240
caggaaccac ctcaactgaa ccgagtgcgg ctttcaccaa cacgatacat agctcggcac 300
tagtgccatc tcatgttagc aagtgtgcat gtgccacac cctaggggtca gaatttatat 360
aagcatgcta tgtgtgggct agtgatggta atttagtctc ttcatanaga ttgaatgctg 420

tacccggagc gtacgtaca

439

<210> 5235

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-D10

<400> 5235

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gcaccgcgag ggtggacgcc tcgtgctgcg gcagatgcgc ctgccgtcgc aggagctgct 120
gcagccctgc aaggaggacg gcaggttcaa gtcctcatg caccggagg cccgcgcgcg 180
gccgtgcggg ggcggcacac tgcaggaacg gcaagggaat gatagctagc gctcttaatt 240
gatcagctga tcagatgac tgccgccacg cacacgtcgt cttgtatggg ctggctgcta 300
caatgcaacc ggtagatctc cctgcttagt ttcttgagat cgagggtcc agttcttgct 360
ttgcattctg caaccgttgt ccaaagtcc acaatcttg ccttccgtca aattttaata 420
catggtcgga acat 434

<210> 5236

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-D11

<400> 5236

ccggtctaga cctcccgggc cgaccacgc gtccaaccac cacctttacc accgaagaga 60
gaaacgcgag caaccagcga tcgccccatg gccgccatgg ctcgttccgt ctccctcgtc 120
gtggcgcccc ttctcctcct ctccctcctc gtctccgccg cggccagtgc gcggaccgtg 180
ggcgacaccg tgcaggacgc gtgcagcaag acccagttcc ccaagatctg cgtggacagc 240
ctcgccgcca agccggagag ccagaaggcg acgccgcgca agctggcgga gctgttcgtg 300
aacatcgcg ccgagaaggg atccgggatg gccaccttcg tgcaccgcaa gtacagcgac 360
aaggaggaca gcgacatatt caagtgtac gacagctgct ccgacgacg 409

<210> 5237
<211> 466
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-D12

<400> 5237

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gagatggtgt cagccacact gtcccatct acgagggata cgccctcccc caagccatcc 120
ttcgtctcga cctggctggc cgcgacctca ccgactacct catgaagatc ctgactgaac 180
gcggtactc cttcaccacc actgctgagc gggaaattgt cagggacatg aaggagaagc 240
tcgcctacat tgccctggac tacgaccagg agatggagac tgccaagacc agctcttctg 300
ttgagaagag ctacgagctg cctgacggac aggtcatcac cattggtgct gagcgcttcc 360
gctgccctga ggtcctcttc cagccatcct tcattgggat ggaagctgct ggtatccacg 420
agaccaccta caactccatc atgaagtgcg acgtggatat taggaa 466

<210> 5238
<211> 463
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-D2

<400> 5238

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tctggcctgc tgcttctga taatcgatca gttccccagt cttgctcctt gcactcctcc 120
ctccatctcc agcatttgtt tctgattcac cttgctccaa tggctgttct ttctgctgct 180
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ttactgaag cacctgtctt tgtggaccct catgggcgtg gtttgctgc cctctccaga 300
gcccagattg agtctgttct ggatcttgca ccgtgcacaa ttgtgtctga gctctccaac 360
acagagtctg actcaaagt cagttctgag tcaagcttgt ttatctatcc tctgaagatt 420
gttatcaata actgtggcac taccaagctc ctgctcacca ttc 463

<210> 5239
<211> 461

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-004-Q1-E1-D7

 <400> 5239

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 tccgcatcca gggccactac atgaagctgg tcgagctgga gggctccac accctgcaga 120
 acacgtacga ctcgctcgac gtccacgtcg gccactgcct ctccgtgctc gtcgacgccg 180
 accagaagcc cggcgactac tacatggtgg cctccacgcg gttcatccac gacgccaagt 240
 ccgcgtccgc cgtcatccgc tacgccggct ccagcgtccc gccggcgccg aacatgaccg 300
 agccaccggc cggctggggc tgggtccatca accaggccag gtcgttccgc tggaacctga 360
 cggccagcgc cgcgcgggcc aaccgcagg gtccttaca ctacggccag atcaacatca 420
 cgcgcaacat caaggtcatg gtctcccgcg ggcacatcga c 461

<210> 5240
 <211> 171
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-004-Q1-E1-D8

 <400> 5240

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 gctggccttc tgctcttggc caagctcgaa caggcttgac aggtcgaacc ctctggagtg 120
 ggagatgatg tcaaagctgg agcagatggc tgagacagag cgcttcatgg t 171

<210> 5241
 <211> 436
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-004-Q1-E1-D9

 <400> 5241

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 agattgatga tttgatgtaa ctttgaaccg ctctaactaa ctaaatcgtc ctcgagtgtg 120
 cggcgggtgc gagcaacaag gccgtccgct ccttggtcgt ccctgcatgt gttccgttcg 180

gttccatcaa ttccaccacg aaataaggct gtataaatct ttcttgggcg ttccctctct 240
ctctgtgca tcgccggacg gaaccaaacg ccaaacgctg ctgcgctctc tccttctcgt 300
cctgaccccc cagagcgaga gggaggggca cccagaggag cctgtcgttt tgatcgggtgt 360
ctctgcccc gttcccgca ggagagaaca acctggagaa aatggcgccg atctccggag 420
ccacggcagt ctttgt 436

<210> 5242
<211> 460
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-E10

<400> 5242

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cggtcagggc aatagcttga ggcaagcacg gcagggacta cggagcacgg ttttgatcgt 120
ctttgtgata caagtgccac ttcacgga ttggcagaat ggctgtgtaa gtaattcttg 180
tgagagagga aaaaaatgaa gattttaata atactactgt caaggcagtg aatggctcct 240
tcatacaagt acacggaact gatcgagttt ttttttggtg ggttgagact tgagagtcac 300
catggctgtc agcttcgtca cgattgtatt tattatcata aaaacacatg attcattgta 360
caagaagagt catgatagac cttcttcatg cagcgtctgg ctgattagaa tttatccaag 420
gcgatttttg tccatagtta cgagctcttg ctgcaaactg 460

<210> 5243
<211> 376
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-E11

<400> 5243

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gcatgctgga tcttcggcca tatgctgtaa atcgcttggt aatttttggt ctactagtag 180
acgaagaaat caaggaaaaa aaaccttgac tacgggaaga aaatcacggc cacaggggta 240

ttttaacctc cttcctaatacg cgcataatc tatcgaagtt gagtaaactt tgatataatg 300
tattcatggg tcacgtccaa ccaacctgt gattgggtgc ttgtaaattt ttgtggcctt 360
aatcatggct tcaatg 376

<210> 5244
<211> 179
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-E12

<400> 5244

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aaccttttcc tttagctgag aagatgaact gctacagcac tgcagtgtag tggttcagct 120
agttatccaa tggattgtgt gctgtaacct gtaacatttg tttgaaattg accttatgg 179

<210> 5245
<211> 454
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-E4

<400> 5245

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gaaggcagcc gtggccgctc tgctggtgtt cgccgcggtg tcgcctgccg cgcgcgcggt 120
ggcggcggag gcggaggcga aggcgaaggc tgtgggaagc gcgcgcgtcg tgcccgctgg 180
ctcgtctggac atcgcgcagc tgggcgcca gggcgacggc aagtcggaca gcaccccgat 240
ggtgctcaag gcgtggaagc acgcgtgcga agcgacgggg cagcagaaga tcgtcatccc 300
caagggcaac tacctgacgg gcgcgtgga cctggtgggc ccctgcaagt cctccatcat 360
catccgcctc gacggcaacc tgctcggcac cggcgacctc aacgcgtaca agaggaactg 420
gatcgagatt cagaacgtcg acaacctgtc catc 454

<210> 5246
<211> 77
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-E5

<400> 5246

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ttttagtctt cgtcttg 77

<210> 5247

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-E7

<400> 5247

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agctccgcgg cgccggcgctc cagctccgac gccgcggcga tggtcggggg cggcgcgggc 120

gcgggcagcg gcggcgaccc gagcggcgcc aagctgctgc agatcctcaa cgtgcggggtc 180

gtgggcagcg gcgaccgcgt ggtggtgctg tcccacgggt tcggcacgga ccagtcggcg 240

tggagccgcg tgctccccta cctcaccgc gaccaccgcg tgggtgctcta cgacctcgtc 300

tgcgccggca gcgtcaaccc ggagcattc gacttccgcc gctacgacac gctagactcg 360

tacgtccacg acctcctcgc aatcctcgac gcgctccgca tcgcgcgct 409

<210> 5248

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-E8

<400> 5248

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ggaagcgaac acttttgtcg gtgccatctt agtgataccg tgggtgctgga gtttaatcag 180

tacacgccgg gctcaagggtg gaggcaagcg ttggtgaaac ggaaggagca tacggaggag 240

ggcaacgagg gcgacgggtt ctacggcggc ataaggaagc tccgcggcaa cgatgacatc 300

tccaagtgga ggcagctgtg gccaacagac gtcttgaggt aagcaggaac cgcattccctt 360

ctcacaccga cattgatcca tcgctcaaatt gacacgcctt tctttcatca tcatattgac 420
 caaattcgtc gtctctgtcg cgctgttgt 449

<210> 5249
 <211> 368
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-E9

<400> 5249

acgcggccag agaccggtct agacctcccg ggccgaccca cgcgtccaag cgatcttcat 60
 ccagccttct gctctgtcc ctcgaaatgg aggcgacgag caaggcgatg gcttcaggcc 120
 tctcgttct gctgttctc atcaacacag gctttgtcct gcccgtecat tccgaggact 180
 gctgggcca caccgcgtc atctgcacca agacgcacaa ctgccgggac gacacttgcg 240
 cggggcgagg catgccggac ggccgctgcc actgggagtt ccccaacctg gtgcccttct 300
 gccagtgcct gcgccccaac tgccactagt ccgggcgcct cggattggct cacttcgccg 360
 gcgatgat 368

<210> 5250
 <211> 458
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-F10

<400> 5250

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 gattgttttg atctctttca attcttccac aaaaggaaca gcccaggga actatacgta 120
 gacaaagcag catgacggat gtcaaattaa ggagctctga aagtacaagc aacttgccaa 180
 agcttagaag aaatgcatct agttcctctg atatgagtag catggcttca caaggctctt 240
 caactaatac agctcctctt agacgcacaa gcagttggac ttttgatgac aaaattttag 300
 tacaagcgtt atacaagggt cttctttcag tatcaaagaa ctaccctatt gtactctata 360
 taagagatat cgagaagttc cttcacaagt ccccaaaaat gtatctcttg ttgaaaaac 420
 tattaaacaa acttgaatgg acggtgttag tccttggg 458

<210> 5251
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-F11

<400> 5251

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cggctctaggc ctcccgggtc gacccaagcg tccacggacg cgtgggggaa aaggagcgaa   60
gagagagaga gagacgcagg accgccggcg acgatcgagg agggaggaac cagatacccg  120
gcggcgggcga tcgatggctc cgcgacgctc atcggcgggc acgtgcctgt gcctcgctct  180
cgccgcggcc acgctggcgc tggcccacgg ggcgcaagga ggaggaccat cggcatcggc  240
ggcggacctg gacaaggtea cggccgagac cttcttggac atcgagatcg acggcaagcc  300
tgcaggccgg atcgtgctgg gactgtttgg ggacaccgtt cctaaaacag cagagaactt  360
ccgagcactt tgcacagggg agaaaggaat tgccaagtcc ggcaagcctc tgtggtacaa  420
ggggtcgacc                                     430
  
```

<210> 5252
 <211> 401
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-F2

<400> 5252

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attcgcgcga ttctgacctt ggtcaatgtc tatcatgcct cacaagtcga accatcagga  120
ctgggagatg atgttagtgc tggcgaagct gtctgacaaa gagcgcttca tgggtgcaga  180
ccacgaccgg ctggcgaagc tgaacgggtc gaagcaacgg aggatggggc agctcgcgat  240
cgactccgac atcttcaacg tgaaaccgat ctttcacgtc gtcgacgtga cgaagtccgc  300
aggcgagacg ctggcgtatg acatgttctg catcagcggc ctaagaattt cactcagcga  360
catcggcatg ggcacccgat gtgacgtcaa catggatccc t                               401
  
```

<210> 5253
 <211> 472

<212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-004-Q1-E1-F6

 <400> 5253

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 agagccttgg catacattca caacagcatt ggagtgtgcc acagggacat taagcctcaa 120
 aatctcctgg ttaatcctca taccatcag ctaaaactgt gtgactttgg cagcgcgaaa 180
 gttctggtaa aaggcgaacc aaacatttct tacatctgtt ctagatacta cagagctcca 240
 gagctcatat ttggtgctac tgaatacaca acagccattg atgtttgggtc tgctggctgt 300
 gtgctcgctg agctgcttct aggacagcct ctgttccctg gagaaagcgg tgttgatcag 360
 cttgttgaaa tcatcaaggt tctgggcaca cccacacgtg aagaaattaa gtgcatgaat 420
 ccaaattata ccgagtttaa attcccgcan atcaaagctc acccgtggca ta 472

<210> 5254
 <211> 443
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-004-Q1-E1-F7

 <400> 5254

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 tgacgacctt ggcaagcgct ggcgaagta ctacgaggca ggtgcccgtt ttgccaagtg 120
 gcgcgctgtt ctcaagattg gccctaata gccatcacag cttgccatcg acctgaacgc 180
 tcagggtcta gctcgctacg ccatcatctg ccaggagaat ggtctggtgc caattgttga 240
 gcctgagatc cttgttgatg gccctcatga cattgatcgc tgtgcttacg tcaactgagac 300
 cgtccttgct gcctgctaca aggcgctcaa cgagcaccat gtctctctgg agggtagcct 360
 cctgaagccc aacatggtga ctccaggctc cgactccaag aaggtgaccc ctgaggtgat 420
 tgctgagtac accgtccgta ccc 443

<210> 5255
 <211> 458
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-F8

<400> 5255

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agccaatggt aactcctgga atcgtcatcg gtgctttctc gctcatcggt gtcttcttcg 120
tcccgatcgg cctcgcttcg ctatccgctt ctcataacat cgttgagggtg atagatcgat 180
atgacgccga gtgtgtgtcc gccaacgaca aggtcggctt catccaggac accaagaccg 240
acaaggcgtg cacaagaaag atcacctgac caaagccgat gaaagggccg atacacatat 300
actaccagct cgagaatttc tatcagaacc atcgacggta tgtgaagagc cgtaacgaca 360
tgcagctgcg gaacaagggc gacgcaagca cgatcgcgaa ctgagagccc gagggcacca 420
gcgaggacgg cggaagccc atcgtgccct gcgggctc 458

<210> 5256

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-F9

<400> 5256

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aaccgcgagt tgctggcctt ctgctcttgg tccacctcga acaggcttga caggctgaac 120
cctctggagt gggagatgat gtcaaagctg gagcagatcg ctgagacaga gcgcttcatg 180
gtgaaaaaac aggacgggct ggtgaagctg caggggtcca agcaaggag gaaggggcag 240
ctcgcgatcg acgccgagat cttcgagggtg acaccggcct ttcacgtcgt cgaggtgaag 300
aagtccgcag gcgacacgct ggagtatgag atgttctgca gcaaggcct aagaccttca 360
ctcagcgaca tctgctggag cagccgatct gaggagaaca tggctccttc agtgggtcag 420
ccatc 425

<210> 5257

<211> 451

<212> DNA

<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-004-Q1-E1-G1

<400> 5257

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aggttaacaa cccccccga cctgctgctg gcgtcgatgc gcgtcgcggc ggataaggcc 120
agggaggcca agagccgggt ggacgagttc gcggcgagga accacgaggg cgggccgatt 180
gagtccatcc tcggcgctg cagcaacggg tacggcaacg ttgtgcagac gctcgaagag 240
gcgcggaaga tcgtcgccac gcgggcggcg gcgggcaccc agggccaggc cgacgacatg 300
aacacgaagc tgtcggccgc cgtcacgagc gccagcgact gccacaacgc cttcgccgac 360
ttcccgcgga ttaggtcccc cttcttgenc atgcagcgga acgtctaccg cctcgctgac 420
aacgttctca acatcttcgt cgtcgtcaac c 451
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<210> 5258
<211> 450
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-G10

<400> 5258

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ttcccgggcc gaccacgcg tcaagcttcg gcctgtcgg gcagccgctc cgctccacg 60
accccgccgc cgccgccggc ctcccgaca tcgacacctt ccgcggcaag ctcgagcggc 120
tgcttctctc cgacgaccac gaccccggtt ggctcgcccg cttcgacgcc gagctcggcc 180
ccgtgcacag gtacttcggc ccggacgcgc cgctggacgt gcggcagcgg atcgcgtaac 240
tgttcgcgat cctcgaccgg tcgtccaggg gcgtcggcgt cggcgtcggc gtcggcgagc 300
tggaggcctg gctgcgctgg caggccgccg cccggctgga cgctgtcacg cggagggaga 360
tggctccgca cgacacggac cgcgacggtg ccgtcacgct gcgcgagttc ttcgcagact 420
ggatcaacat gggacatgac aaaatggggt 450
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<210> 5259
<211> 420
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-G11

<400> 5259

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ccgccgcaac cgccacatca gccatgggcg cctgcgcaac caagcccaag acgcttgagg 120
ggcaggcccc agctgaggcc gccgtctcca caccgaaggt tgcgcccagag gccactccaa 180
tctccgttga ggttgcggt gatgaacagg tagctgagaa ggtgggtggtg gaggagccgg 240
ctgcggcggc cgacgttgag catcagaagg ctaatgaggt gctcgctcca gaggcggccg 300
tcgccgagcc cgaccacaag gaggaggaag ccgtggagaa gaccgtcgtc gaggaggaga 360
agccagcggc agcagcccat gcagaggaaa aggtcgccac cgccgccgag aacacgacga 420

<210> 5260

<211> 459

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-G3

<400> 5260

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ataatgaaga gccgcagcat ggcatcatcg gccgcgctct tgggtgctagc cctcgcgcta 120
gtggcgggcca ccgccccaca ggtagcggag gcaaagaaga agagagcggc ggagagcggc 180
gaggcggcgg aggcgaagaa gatccaggac gacttctgct cgacgctgtg cgagggcaag 240
aaggggacgg acctggctgt gtgcaaggag tctgcgcgcc tctcccagca gtccaacctg 300
gtgctgtacg gcaggatcca gtgcaagggc aagtgcaccg agcagaaggg catcacggcg 360
ccggccatga aggtctgcca ggaggagtgc gacaaggcgt acgtggtgaa ggcggccgag 420
gtcaccaagg cctgcagcgt cacctgcgcc aaggagaaa 459

<210> 5261

<211> 471

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-G4

<400> 5261

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gctgaccctg aaatcaagga ggaggtgggc gacagctccc ttgaattcct catccttgct 120
 agtgatggac tctgggatgt tgtcactaat gaggaagctg ttgccatggc caagcctatt 180
 caggaccccc aggaagcagc aaacaagctt ctgaagaag cgtcccgaag gggaagctct 240
 gataacatca ccgttgtcat cgtccgcttc ctatatggaa ctaccgggta taaatcaggc 300
 gcagacaaag agaccaccaa tgaccaaacc tcctaattac ctctgtagg gatccctcat 360
 gcgtgtgttt tcttctggct gttgtatctg atgctcaaag tagatgctcc gtgtgtcttc 420
 cgctgctgtt ccgcaaggaa actgactccc ccgaccgtcg tcgtgatgct g 471

<210> 5262
 <211> 472
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-G5

<400> 5262

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 tagcggaggc aaagaagaag agagcggcgg agagcggcga ggccggcggag gcgaagaaga 120
 tccaggacga cttctgctcg acgctgtgcg agggcaagaa ggggacggac ctggtcgtgt 180
 gcaaggagtc ctgcgcgctc tcccagcagt ccaacctggc gctgtacggc aggatccagt 240
 gcaagggcaa gtgcaccgag cagaagggca tcacggcgcc ggccatgaag gtctgccagg 300
 aggagtgcga caaggcgtac gtggtgaagg cggccgaggt caccaaggcc tgcagcgtca 360
 cctgcgccaa ggagaagaac ccgcgcctca gcgagaactg caagaggtcc tgcaccctc 420
 ctctttcttg aagcgaagcc ccttgaaatg aatgaaccat gcatgcatgc at 472

<210> 5263
 <211> 462
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-G6

<400> 5263

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 gtaccgcgtg cgcgggggcg acggcgaggt ggaggtcctg gtgatcagct cgcagaagaa 120

gggccccgcg gggggcgtgc tgatcccca gggcgggtgg gagctgggcc gctgggtgcta 180
 ccgcagccgc agctacgacg ccacgtacga gggcttcgtg ctcccgtgc ggcgcaccgc 240
 ggagctggac cggcggcccc agatggccgc gcgcgcgagg gagtgggtct ccgcagccga 300
 ggccatcgcg cgctgcccc acccctggat gcgcgaggcg ctgcagcggg tctccgacac 360
 cgtcgcggtc gcggcggaga cgatgcacct cgctccgcc ctctagctct agggccggcc 420
 ggccgtcgat cgattccctc ttcccgccgc ggtttcgtcg ga 462

<210> 5264
 <211> 468
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-G7

<400> 5264

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 ggtcctccgg ctgcgcgtgg acctcgccag agggctgagc tacctgcact cgaagaatgt 120
 gatgcaccgc gacgtgaagg cggagaacat gctgctggac cggaagcgga cgctgaagat 180
 cgccgacttc ggcggtggcg gcgtggaggc gcagagctgc gaggtgacgg ggcagacggg 240
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 cgtgtacagc ttccggcatcc tgctctggga gacctactgc tgcgccatgg cctaccccaa 360
 ctacagcctc gccgacatct cctaccacgt cgtcaagctg ggcatccggc cggacatcgc 420
 gaggtgctgc ccgcgggcgc tggcggagat catgacgcgg tggtggga 468

<210> 5265
 <211> 372
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-G8

<400> 5265

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 acttcaacat ggtgacgac accaatgtgg gcggcgctgg cgacatcgcg gcggtgtcgg 120
 tgaaggggag caagcgcgtc aagtggacgg agatgaagcg caactggggg caagtgtggc 180

agaccgggga ggacctcacc tgcgagtcgc tgacgttccg ggtgatgacc agcgaccacc 240
gcaaggccac ctcatggcac gttctccccg ctgactggaa gttcggcgtc acgtaccagg 300
catccaagaa cttctaagtc ctccaagcaa atacaccttc ggcagtatga tatgcgaact 360
gacacagcat ga 372

<210> 5266
<211> 420
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-G9

<400> 5266

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gatgtcgtcc ggcaacaaga tcagcgtgga cttgctgagc gtggccctag tgggcctgct 120
cctctgccat ctgccacca ccgctccgc gcaccagaac gacatccacg tcctcggcag 180
cgtcgaccgc tccagcgacg gcagcagccc cgagtccgaa agccgcgtcg tctacgcggc 240
catgaagctg gctgatacgg aatccgatgc gccggcgccg gcgccggcac cggggccgctc 300
gtctggttga tctgagaagc gtgctctag ccaagcaagg tggtaaaaac cgagaactaa 360
ttaaaggctc gattgtgtgt ccggctacta ctgttcttgc cataattata tagagatacg 420

<210> 5267
<211> 443
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-004-Q1-E1-H1

<400> 5267

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caacctccgc ggccgtggcg gcggcgaagg ccgatgacgc cctgcgccag cgcccgccgg 120
ggctcgtgca ngtcggggag cgggaccagg gcccgctgtc gacggggcac cagcacctgc 180
accaccatca ccaccagctg cggcggtcgg cggcggtccc accccgccgc cgggggccgg 240
ggcgccgccc tctcagcgc tgcgaaagcg acctcaacat cagggagcac cgctcctgca 300

gcgaggtggc cggcggcacc gggcggggct gcgccgtgt gtgctgctgc ttccctgcg 360
 tcatggtgga ggtcgcggtg ctgccacgg tgcgcgcgcc cggggcgctg tgccgcaagg 420
 ccgcccgcgt gcgcaagggc cgc 443

<210> 5268
 <211> 458
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-H11

<400> 5268

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 tcgtgttcgc gcgcgacatg gtgatcgagc tgcggcagga gctgatcgtg aaccacaaca 180
 agacgatcga cgggcggggc gcgcaggtgc acatcatgtt cgcgcagatc acgctgcaga 240
 acgtgcagaa cgtgatcctg cacaacctgc acatccacga ctccaaggcg cactcggggc 300
 gcatgatccg cgactcgaag cggcactacg ggctgcgcac gcggagcgac ggcgacggcg 360
 tctccgtgct gtcgtccagc aacgtgtgga tcgaccacgt gtccatgtcc agctgctccg 420
 acgggctgat cgacgtggtg aacgggtcga cgggcac 458

<210> 5269
 <211> 445
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-004-Q1-E1-H3

<400> 5269

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 cgattccggc gacgacctc gccgtcatct tatccgtcct cttctgtgcc gcggctggca 180
 ccgccgtcga caacgacctc cccgactacg tcatccaggg ccgcgtctat tgcgacacct 240
 gccgcgcggg gttcgtgacc aatgtcaccg agtacatcgc gggcgccaag gtgaggctgg 300
 agtgcaagca cttcggcacc ggcaagctcg agcgtccat cgacggngtg accgacggga 360

acggcacgta cacgatcgag ctcaaggaca gccacgagga ggacatctgc gaggtgggtct 420
 tgggtggagag cccgcgcaag gactg 445

<210> 5270
 <211> 449
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-H4

<400> 5270

accacgcgt ctgatgtcga cgtcagggaa gaagattcct ttgaaatcag tcacttcaat 60
 cgtcgatggg ctaaagaaat cgtacattga gaagttgagg cccttgga aaacctatca 120
 gttccatgac ttcgtgtctc ccttgctgac tagcagcgat ttcgatgcga agccaatgg 180
 catgctgttg ggtcaatact ccacggggaa aacaacattt ataaagcatt tactaaaaac 240
 aagttatcca ggcgctcata ttggggccaga gcctacaacg gacagggttg ttgtcatcac 300
 ttctggacca gacgaaagat gcattcctgg aaacaccatc gccgtccaag ctgacatgcc 360
 atacagtggc ctgtcatcgt tcggaacagc atttttgtcc aagttcgaat gttctcagat 420
 gccacatcca ctgttagagc acgtgacct 449

<210> 5271
 <211> 442
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-H5

<400> 5271

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 gccgcacttc caccgcggcg tgcttcttga ccaggcggc ttcagggtcg gcctcggcaa 120
 cgcggcggtc ggcggcggat ctggacgcgc actacgcggc gaacaacatc gtgttggcct 180
 ccttcgccag ccagctctc gctaacgccc ccgcaccatc gcgggatgat cgtgctggcg 240
 ggaggacgcc gtcgaacgag atggacgatg agctgtacga catcaccggc tgcgacagcc 300
 acgtcgcagc gagcttgcg tgccccagcc aatccggggc catggcggtc tggtcgtcgt 360
 ccaagaagtc gtacgatatc tgtaccagcg ccggcggaac agtaaccatg ccggcccatg 420

acacatacca cctcgccggg gc

442

<210> 5272

<211> 467

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-H6

<400> 5272

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gtcgtcttcg gcacccagca cgtgaacgcg cagcacaacc agcggacgtt ccacttcgcg 120
gacgagacgg cgcagaacaa cgtgtgggag atgttcgacg gggagaatgt gcccaagtac 180
aagcaggcca agatcagggt ggcgaaggcc ggcgacctct acaacctcac caaggacaag 240
accgactacg tctggtacac ctccagcttc aagttggagg cggacgacat gccgatccgc 300
agcgacatca agacagtgtc cgaggtcaac agccatgggc atgccagcgt ggcgtttgtc 360
aacaacaaat tcgtaggatg tgggcacggg accaagatga acaaggcgtt cacgctcgag 420
aagcccatgg acctgaagaa gggcgtgaac cacgtcgccg tcttggc 467

<210> 5273

<211> 447

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-H7

<400> 5273

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ttcttaggcc gccctctaca cttctcgaca taaccatcga gagggcggtc gagagaaacg 120
agagcggcag acaccatggg gagctcgagg accatcgttg cgtccccct gtcctcctc 180
gccctcctcc tcttggttt cgcggccacc gccgaggccc gcgttgtccc cgagctgttt 240
ggcgaggacc aattccagcg gacatgcaac caggtgcact tcaggaagat gtgccagagc 300
ttgacgaggc tcccagggt gaccacgccg cgcgagctgc tgctggcgtc gatgcgcgtc 360
gcggcggaga aggccaggga ggccaagagc cgggtggacg agttcgcggc gaggaaccac 420
gagggccggc cgatggagtc catcctc 447

<210> 5274
<211> 428
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-004-Q1-E1-H9

<400> 5274

ccacgcgtcc aatcgatcac gacaagatgg cgtgcacaaa caatgcgatg agagccttgt 60
tcctcctgggt cctctttctgc atcgtgcatg gtgagaagga agagtcaaag ggcacatgatg 120
cgaaagcgtc cgggcctgggt gggtccttcg acatcaccaa gttgggcgcc tccggcaatg 180
gcaagacaga cagcacgaag gctgtgcagg aggcattgggc atcggcgtgc ggcggcactg 240
ggaagcagac aatcctcata cccaagggtg acttccttgt cggacaactc aacttcacag 300
gcccttgcaa gggcgacgtg accatccagg tggatggcaa tctgctggcg accacggacc 360
taagccagta caaggacat ggtaattgga tcgagattct acgtgtggat aacctgggtca 420
tcaccggc 428

<210> 5275
<211> 220
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-A2

<400> 5275

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ctactatcca ttcaatcgat gaaaaacaca catttgctg acattacatt tggagttcca 120
tcgacggtat atttggaata aaaacaatta gcttataaaa tgtgtgtttt tcatcgattg 180
aatggataat aataaaaagg catgctggca gttactacta 220

<210> 5276
<211> 230
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-A3

<400> 5276

gaggccgcgt caaacgtcaa cgcattgctgg cagttactac tatccattca atcgatgaaa 60
aacacacatt tgcgtgacat tacatttggga gttccatcga cggatatattt ggaaaaaaca 120
caattagctt agaaaatgtg tgtttttcat cgattgaatg gataataata aaaaggcatg 180
ctggcagtta ctactaaaga aagaaaacaa agggcgggcg ctctagagga 230

<210> 5277
<211> 363
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-A5

<400> 5277

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aagagccgca gcatggcatc atcggccgcg ctcttgggtgc tagccctcgc gctagtggcg 120
gccaccgccc cacaggtagc ggaggcaaag aagaagagag cggcggagag cggcgaggcg 180
gcggaggcga agaagatcca ggacgacttc tgctcgacgc tgtgcgaggg caagaagggg 240
acggacctgg tcgtgtgcaa ggagtcctgc gcgtctctcc agcagtcctaa cctggtgctg 300
tacggcagga tccagtgcaa gggcaagtgc accgagcaga agggcatcac ggcgccggcc 360
atg 363

<210> 5278
<211> 301
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-A6

<400> 5278

ggtaacggtc tagaattccc gggccgaccc acgcgtccac ggaagcatga ggcggaccca 60
tcaagtacat ggtcatccaa agcgagcccg gcactgtcat ccgcgggaag aagggatccg 120
catgcataac tgtcacgaac acagggaag cgatggtgga cagcatctac gacgagccca 180
tgacccccgg ccagtgaac atggatggtc gagaggctcg gcgactacct cgtaaagcaa 240
ggcctgtgaa tggcttcagt taacctcgca cgctcgctg tccatggatc gagcatccag 300
c 301

<210> 5279
<211> 410
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-A7

<400> 5279

gggtcgaccc aagcgtccgg aagcaactga aaacagccga gcgatctcct ctccctctcc 60
ctctccgata cattctccag cgcagcgaag tagacatgtc tgaccgggca aagatgtcgt 120
ggcaggcgta cgtggacgag cacctgatgt gcgagatcga gggccaccac ctgcgggcgg 180
cggccatcgt cgggcacgac ggtgccgcct gggcgcacag cacggcggtc cccgagttca 240
agaccgagga catggccaac atcatgaagg acttcgacga gccagggcac ctgcgcccga 300
caggcctgtt cctcggacct accaagtaca tggatcatca aggcgagcct ggtgccgtca 360
tccgtggcaa taagggatca agaggcatca cctgaagaa cacagggcag 410

<210> 5280
<211> 223
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-A8

<400> 5280

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cgcacccgca atgggggtgcg cggcgtcagc cgccaacggg gccggggccc ggcagcgggg 120
gtgggcgcgg acgcggatgc ggtggtacat ccaggcctcc acctcgggtc tgccgccgcc 180
gccgccgccg acgcacgacg cggcggagtc gtcacccggg ggc 223

<210> 5281
<211> 250
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-A9

<400> 5281

gaccacgcg tccgagctat tatgcatcgg taagctcgac cgctccatcc acggtgtgac 60

tcacgggaat ggtacgtaca cgatccatct caacgacagc cagcaggatg acatcatgcc 120
acgtgggtctt tgtggggagc cctcgcaagg actgcgacca tgtgcacgca gacagggacc 180
gcacctgcgt cgtgctcacc agcaacgtcg atatcagaga caatctgcgc cccgccatac 240
cgctcagcta 250

<210> 5282
<211> 352
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-005-Q1-E1-B1

<400> 5282

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aacaacattg ttttttttat gagaaaaata aagggtgtaa ttgggagttc aaggtcacgt 120
acattagcat tctcaggagt ggggtgtcac gcacaaatgc cttttttttt ctctctgttt 180
ctttctctaa tattgatccg cttttttgtg gacatgttat ctcgttcaag atttcgtata 240
taaactaata ctttgggcgg gatatatata tctgtctcac tcatttatat catatgtatt 300
aaatatgcgt ttttgttatg caatatatat atgcagctca atgcgtgttt tc 352

<210> 5283
<211> 285
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-009-Q1-E1-H4

<400> 5283

gggccgaccc aagcgtccag tggccatgta gatgatgggt gcccaggcat cacattccac 60
attgctgata atcctgcatc aacagcttgg accacatgac tagctttttc gtggtgggaa 120
tgacctctac tgcttgcgat tctatgttgg ggtacctcac ttgcgtgatg gtgaaggctc 180
tgtggctctc gaagatgctc tcgtttccag cactttgcct cacggccact tgcgtgctca 240
aggcactcag tcgctctgcc tcagctgtcc agtccaccgt gatat 285

<210> 5284
<211> 455

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-009-Q1-E1-H6

 <400> 5284

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 cggtgacaat ggtgaggtgg ctgccgccgc cgcgccagc ggacggcgag atacccttcg 120
 gacacgacgc cgtcgccttg tccttcttcg tggcgtgtgt ggccgccacc gtcgcgctcg 180
 cgtcgtccat gtgctcggca tgcggtcgca agccgaaggc ggccacccgt gcagacccgg 240
 ccgcttcgga ccagtccacc gggacgggct cgggctccgt ctccggcggc ggcggaagcc 300
 aggaggctag cgcgcggag gcggaggagg aagtggtag actgtcaccg gagctggcga 360
 tgcacggcgc catcgacccg gtgacgtgc cgtcgtcgac gtcgaagcgg cgctgtcca 420
 tcagcgtgag caagaagctg agcatgaaca tcccg 455

<210> 5285
 <211> 144
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-009-Q1-E1-H9

 <400> 5285

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 tgtaactgag aaaggaaagg aaaacaaaaa tgtaactgcg tggctgtacc aaattctgag 120
 tgctggattc ttgctattgt cacc 144

<210> 5286
 <211> 180
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-A1

 <400> 5286

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 ctgcatcaag ttcattgtctc gtaccgataa tgtaaagcta catgccttct tagctacact 120
 gcctgtgaca tagtccgtg catgtatgca atgtatcata ggagggaacc cattccgtat 180

<210> 5287
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-A10

<400> 5287

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gcacccccctt ttcagcagct atcggcaggg cagagaagtg actcttgtga taggctgaca 120
gcagagacaa acttgtacac gagatcaacc aacggcatcg ctgccactgc agcacgagtg 180
gcagcaacta ctcacataaa tgtcggcggt gttccgtttg gcatgtcaaa catgtattag 240
ggactggatc atggacgagt catggtgaat cctctgtgcg gttgatgggt ctatgctgcc 300
ttcaagtggc gatacaccga caacttgaag cggccactca aacctttgga tggatgctgc 360
aagtttagag tgcagtagac agtggttttt ctgtgtggtc atgaagagac gaacaccgc 419
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<210> 5288
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-A11

<400> 5288

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ccgggccgac ccacgcgtcc agtggtcgta ccacaggtat cgtgctcgac tcgggagatg 60
gtgtcagcca cactgtcccc atctacgagg gatacgccct cccccacgcc atccttcgtc 120
tcgacctggc tggccgcgac ctcaccgact acctcatgaa gatcctgact gaacgcggct 180
actccttcac caccactgct gagcgggaaa ttgtcagggg catgaaggag aagctcgctt 240
acattgccct ggactacgac caggagatgg agactgccaa gaccagctct tctgttgaga 300
agagctacga gctgcctgac ggacaggtca tcaccattgg tgctgagcgc ttccgctgcc 360
ctgaggtcct cttccagcca tccttcattg ggatggaagc tgctggtatc tcacgagaca 420
cctacaactc cat 433
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<210> 5289
 <211> 460

<212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-A12

<400> 5289

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 gtcgtcctct cctgtgccgc ggctgacgac ccgaacctcc ccgactacgt catccagggc 120
 cgcgtgtact gcgacacctg ccgcgccggg ttcgtgacca acgtcaccga gtacatcgcg 180
 ggcgccaagg tgaggctgga gtgcaagcac ttcggcaccg gcaagctcga gcgcgccatc 240
 gacgggggtca ccgacgcgac cggcacctac acgatcgagc tcaaggacag ccacgaggag 300
 gacatctgcc aggtggtgct ggtggccagc ccgcgcaagg actgcgacga ggtccagggc 360
 ctcagggacc gcgcggcggt cctgctcacc aggaacgttg gcatctccga cagcctgcgc 420
 cccgccaacc cgctaggcta ctttcaagac gtgccgctcc 460

<210> 5290
 <211> 413
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-A3

<400> 5290

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 gcacctcgcc tctcagcgc gtttctccg ttaatccggt agaaaatggc cgatgccgag 120
 gatatccaac ccctcgtctg ccacaacggg actggcatgg tcaaaggtgg gttccctggc 180
 gaacacaccc cgatggccgt tttccccaac atcgtggggc gcccgcgcca cactggtgtc 240
 atggtcgggg tggggcagaa ggacgcctac gtcggtgacg aggcgcagtc caagaggggt 300
 atcctgaccc tcaagtaccc catcgagcac gggatcgtea gcaactggga cgacatggag 360
 aagatctggc atcacacctt ctacaacgag ctccgcgtgg ctcccgaaga gca 413

<210> 5291
 <211> 403
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-A6

<400> 5291

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ttccgcacac aacgctctcc ggggtgtttt catcctagcc gtggttaagtt gcctatgcac 120

aagcaaaaagg acaagagcca acaaggaaaa atccgcggca acccccggtg gcgctgctgg 180

aggcagcggc gggacgttcg acatctccaa gtcggcgcg accagcgacg gcaagacgga 240

ctgcacaaag gcagtccagg acgccttgac gtcaacgtgc gaagcgaccg gaagcgccac 300

gggtggtgatc cccaagggcg actacctggt cggccctctc aacttcactg ggccatgcaa 360

ggggagcaac atcgccatcc agctggaatg gaacctgctg gga 403

<210> 5292

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-A8

<400> 5292

acggtcagga attccccggc cgaccacgc gtcaggtaa gtccggcgcc tccaaggtgg 60

ccgtcaacga cgtcgtcttc aagaacatcc acggcacctc caacacgccg gaggccatca 120

cgctcaactg cgccaacaac ctgccatgcc agggcgtgca gtcgtcaac gtcgacatca 180

agtacaatgg atcgggcaac aagacaatgg cggtcgggaag aaacgcaacc ggaagttcaa 240

ccggtttgga aagggaactc cctgcatccg aaccaattta ctaacatgca taaattaaat 300

atataatcac tctcgtaac ctctctcctt ctcaagtact ctcaagttcc caacgaatat 360

ataatccgct gggttgtatt tt 382

<210> 5293

<211> 351

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-010-Q1-E1-B1

<400> 5293

gacccacgcg tccaccacg cgaccgcctc gatccgcagc gaggcccttg tgcaggcaag 60

cggcggcgctc cccgaagccc cgaggaggcg gcacttccaa ggccggcgag caagcgacgc 120
ccgtcgacgt gcgagtagcg acggcgacgc atgaggcgcg atgttcgatc gagcgacgtc 180
acggaacggg cgacatgcnc gcagcgatga tcgcgcgtga catcctctga tccggcgcat 240
ttttcttttc gtttattatg ttttatgcct aacacatgta ttatttacgc taaaaactgt 300
acgtttttat gotttaacac agagttcgta tatcagttta cggcatgcac a 351

<210> 5294
<211> 436
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-B10

<400> 5294

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gcgtcaccag cctgtgcacg cacaaggcca ccggggagcg ctctcgctgc aagaccatcg 120
ccaagcggaa gctgtccacc aaggaagacg tagaggacgt gcggcgcgag gtgcagatca 180
tgtaccacct ggccgggcag cccaacatcg tggagctcaa gggcgcctac gaggacaagc 240
agtcggtgca cctcgtcatg gagctctgcg ccggcgggga gctcttcgac cgcatcatcg 300
ccaagggcaa gtacacggag cgcgccgccg cgtccctgct ccgcaccatc gtggagatcg 360
tgcacacctg cactccatg ggcgtcatcc accgcgacct caagcccagag aacttcctcc 420
tcctcagcaa ggacga 436

<210> 5295
<211> 430
<212> DNA
<213> . Zea mays

<223> Clone ID: LIB148-010-Q1-E1-B11

<400> 5295

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attgttcttc aaccaagagg aagaaaggaa ggaagggacc ggtagcatca gccatgtcga 120
actcggcgctc gggaatggcc gtctgtgatg aatgcaagct caagttccag gagctcaagg 180
caaagaggag cttccgcttc atcgtgttca agatcaacga gaacgtgcag caggtggtgg 240

tggacaggct gggggggcca ggagagagct acgacgcctt cacggcctgc ttccccgcca 300
 acgagtgccg ctacgccgtg ttcgattttg acttcgtcac tgacgagaac tgccagtaga 360
 gcaagatcgt cattatctct tgggccccgg atacatcgac ggtgagaagc aagatgctgt 420
 acgcgagctc 430

<210> 5296
 <211> 425
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-B12

<400> 5296

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 ggccatgttt ctccatgaat ggggtttctg gatcagcaac tatgggtgct aaagttgatg 120
 ctgctacaag ttcagctata gctgcgccct tggtagcttc agatgttaaa ccctctcagc 180
 cggtcagtaa ttcagctacc aagatgatta tgtcaagcaa atccactgct aaggaattta 240
 aactcaatcc ttgtgcaagg gttttctctc catcttttgc aagttctagg caagtacttg 300
 cagctatggc ccctgttgac acatactaca tttcacactc tgcccctgaa gtaccaatgg 360
 gcgtacctgt atatgagtca aagtctgtgc ctggcgtttc acctctaacc aacaaggttc 420
 attgt 425

<210> 5297
 <211> 186
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-B3

<400> 5297

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 agtggcgtgc atgttctgca acatgaccgt cgaaatggga tacggcatgg ccaattacgg 120
 tgacagctac tacaccgat gcgctagatg ctggctatgc aaatgcgacg acgcgtgctc 180
 cgccta 186

<210> 5298

<211> 357
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-B6

 <400> 5298

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 cgtcgctga tcagctccac caaccaagat gaacttggat cgttatgcc aacagatgcac 120
 tacaagacgt tgtgtccac gatgacgaca ctgcctgggg tgactacgcc agagcaactc 180
 ttagatgcat ccttgcggat tacagcgggt aaggcagcga tggcggagat gaagctagac 240
 tatgcaataa aatcatgcag tgctcagggt aacccgatga tgctgctgct aaagacatgc 300
 aaggagagct acgcgtcgct ggtatactcc atcaataaca cgcggaacac gctcaaa 357

<210> 5299
 <211> 258
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-B8

 <400> 5299

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 cccattgagg aagcttgaga accagttaac aagaattgcc aacatattct tggacaatct 120
 tgtaacaga gttttaaggt ttcccagcag aaaattttcc aatccaagaa gaaggccttg 180
 aaacaacaaa atcaaaatat taattagcaa ggttaaaga aaaaggaaca ttggcaaaag 240
 tattgagaaa gggattct 258

<210> 5300
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-B9

 <400> 5300

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 caggtggatg gcaatctgct ggcgaccacg gacctaagcc agtacaagga acatggtaat 120

tggatcgaga ttctacgcgt ggataacctg gtcatacccg gcaagggaaa ccttgacggg 180
cagggcccag ccgtgtggag caagaactcc tgcaccaaga agtatgactg caagatcctt 240
cccaactcgc tggatgatga cttcgtgaac aacggggagg tgtccgggggt cacgctgctc 300
aactccaagt tcttccacat gaacatgtac cagtgcgaaga acatgctgat caaggacgtg 360
accgtgacgg cgcccgggga cagccccaac acggatggca tccacatggg cgactcatcc 420
gggatcacca tcaccaacaa 440

<210> 5301
<211> 221
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-C1

<400> 5301
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ctcgtcggc gtgctcctgc tgcaggtggt caccgcggg ccacccatgg ggctcacgca 120
ccacgtcgag aaggccatcg acgcgggcac cttcgcgcag atgctcgaca tcaccgtcaa 180
ggactggccc gtcgaggagg cgctcggcta cgcaaagctc g 221

<210> 5302
<211> 446
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-C10

<400> 5302
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gtagccgccg ccgccggacg agacaggttg aggcggggcg gcaatggccg ccggggacct 120
tgaggtgctc accgcgctcg acaccgcgaa gacgcaatgg taccattca ccgccatcgt 180
ggtcgccggc atggggttct tcaccgacgc ctacgacctc ttctgcatct ccctcgtgac 240
taagctcctc ggccgcatct actacaccgt ggaggggtcc gcgacgcccg gcaccctccc 300
gccgcacgtg tccgcgtccg tcaacggcgt ggccttcgtg ggcacgctgt cagggcagct 360
cttcttcggc tggctgggcg acaagctcgg gcgcatgaag gtctatggca tgacgctcat 420

gctcatgggc ctctgttccg tgcggt

446

<210> 5303
<211> 457
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-C11

<400> 5303

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gctgcgcgcg acgcttgccg agcgcaagcc gaccaaccgg tacatcagct acgcgcgct 120
gcgcgcgac caggtgccgt gcaacaagcg cggccgggtcc tactacacca actgcgcggc 180
gcagacggcc gccaaacct accgcccggc ctgtccgcc atcacgcgt gcgcccgcag 240
catgaactga gcgccaaggg ggcgccggc ggtctgatct gctgctggc tggctgggca 300
gggggcacgc agctggcctg gctcgatcgc acaccatgca ttgacgtcgt cgcggccggc 360
cgccatgccg ttggacgggt gggtcggacg atgaccgagg atgaagcggc ggcgcgacga 420
tagtatatac aaacaccaat gaccaaccat actacca 457

<210> 5304
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-C12

<400> 5304

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gcagcaagca gagatcagat catccatcgg caatgtcgaa catcgggcag tccttccagg 120
ccggcaaggg ggaggcccag ggcgagtacc aggcggagca cgcggcgag tgcgtcaagg 180
acaccgcccg agccgcccgc gacagcgcgc agctgcagca gcaccgccc accggcaccg 240
ttgagcaggt ggcgagacg ggccagggcg tggcggcagg cgtcaaggac acggtggcgg 300
gcgcgcggt tggcgtcacc aacacggtgg cggcggtggc ggcgggcgtc acgaacacgg 360
tgaccggcgc ggtggcgggc gtcacgaaca cggtgaccgg cgcggccgcg ggtgtcaagg 420
acaccgtgac cggcgccac tga 443

<210> 5305
 <211> 167
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-C2

 <400> 5305

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 caattcccct cctcctccca acaaggcaac aacaatctgt tccggccgcc aaacagaacc 120
 caaaaaaaaa aacacactga acccaataat ccgatcccaa gaaaact 167

<210> 5306
 <211> 195
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-C6

 <400> 5306

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 aatgtccttg gaaaccttcc ggttgaaaac cccccggtta aattacggca acggcaagat 120
 caattcggat taccgctacg acacaaccga actcttcccc ccggagaatg gcggcggcgc 180
 ggtgtgtgtg gtgcc 195

<210> 5307
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-010-Q1-E1-C8

 <400> 5307

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 cttoctgttc gtgaacaagt cggaggagtc acctctcaag gccatcgact tcggcctctc 120
 cgtgttcttc aagcctggag atcggttcac cgaagtgggt ggcagcgggt gttacatggc 180
 tccagagggt ctcaagagaa gctatgggcc agagatagac gtgtggagcg ctggtgtcat 240
 cctgcacatc cttctctgcg ggttccctcc gttttgggga ggctccgatg agaaaattgc 300

acagtcgata ctccgtgggg taattaactt acagaaggat ccatggccca aggtctccca 360
gagcgcaaag gatcttgtca cgaggatgct tgaccagat ccttgtacac ggttgacggc 420
a 421

<210> 5308
<211> 427
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-C9

<400> 5308

ccacgcgtcc gcggtcgtcc acatcctttt ctctcctcct cgccggccca acctgattgt 60
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gcgtcgggaa tggccgtctg tgatgaatgc aagctcaagt tccaggagct caaggcaaag 180
aggagcttcc gcttcacgt gttcaagatc aacgagaacg tgcagcaggt ggtggtggac 240
aggctagggg agccaggcga gagctacgac gccttcacgg actgcttccc cgccaacgag 300
tgccgctacg ccgtgttcga ttttgacttc gtcactgacg agaactgccga gaagagcaag 360
atcttcttta tctcttgggc cccggataca tcgaggggtga taagcaagat gctgtacgcg 420
agctcca 427

<210> 5309
<211> 371
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-D1

<400> 5309

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tgctttgccga tgtggtgaag tttcagacag atcgattcag ctagcttctt tccatgattc 120
catccacgga gctcagctag ctcgcatgg acttcagccc tcaaagaaag agcgccgaac 180
gcaaccgcgg cagcttcgaa cacgatgaca gtgatgatga catcagagct gaatccaacg 240
cctctaataa gccatctgcg cattcgcacg acagcaccaa atccaagccc aagacgagcc 300
atggcggttc aaccgaagt atctccgaac cgacagcggg caacaataat gctgacgcca 360

ccaacttgga c

371

<210> 5310
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-D10

<400> 5310

cgggtcgacc caaacgtcca tccatcaacg aaacaggcac acaagaacaa atacctcgcc 60
accaacaatg gctccaggt cctccatcct acttgcaacg gcgatgctgg ttgctgtgtt 120
tgcggttggt ttgtgcacca ccccgctcac cttccagggt ggcaagggat ccaagcctgg 180
ccacctgac ctcaccccca atgttgcaac catatctgac gtggagatca aagagcacgg 240
ggcgatgac ttctccttta cgctcaagga gggcccgacc ggcacctgga cgctcgacac 300
caaggcccg ctcaagtacc ccctttgcat ccgctttgct gtcaagtcgg gtggctaccg 360
catcgccgac gacgtcatcc ccgccgattt caaggccggc accacata agaccacact 420
cag 423

<210> 5311
<211> 427
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-D11

<400> 5311

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tgttgaggaa atctttgaat aagaatgaga gtccaaatga cataatggcc ctctgttag 120
ctgctaagat atgtagttcc aataatcttc tttcttctga ggggtgtagag tatgcaaaga 180
gagcagtcag agatgccgaa tcatcagatg ggcatttaaa gagtgtggcc ctccatgttc 240
tggggagttg cctgtccagg aagtctaagg ttgcttcac tgatcaccaa aggtctgtct 300
tgcaggctga ggctttgaag tcaactcaatg aggcaatttc tcttgaccgt cacaaccag 360
aattattatt tgaattgggg atagagtatg ctgagcagcg gaatatgcat gctgccttga 420
aatgtgc 427

<210> 5312
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-D12

<400> 5312

ggtctaggat tcccgggccc acccaagcgt ccacccacgc gtccgggaaa ctcatatgca 60
gatgcaattc atgaggcttt tcatccaaaa gatcacccaa aacccaaacc agattcaacg 120
atggaatata ggacgacatt tataagagct aagtatgaga cacaagattt tttgaacca 180
tctttgcgca tatcatcaag atcatctttt acagcgacca gttctgtgaa gagtgtagat 240
agcactttct cgaacacttc aacgaaggat atctctgaag atacaggaga acttgttgga 300
gagctgaata ttagagtcgt gataggtact aacttggtcg ttagagacat gctaacaagt 360
gatccataag tcgttttaac actcggacgg cagacagctc aatcgacagt taataaacgt 420
gatcgtaatc cggtacggaa tg 442

<210> 5313
<211> 79
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-D3

<400> 5313

tagtgagtcg tattagggcc agccgagctc aactggtaag cggatttggc cggacatatc 60
gcttacgagc atagctgtc 79

<210> 5314
<211> 322
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-D4

<400> 5314

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tgtgaattgc agaatccgcg gaaccatcga gtttttgaac gcaagttgcg cccgaagcct 120

tctggcggag ggcattgtctg cctgggcctg taacctgtta atggatcgga ttctcgtgc 180
 caattcgtga tcttgaccgg tctaagaaga tggggacttg cgtctttgtt tcattgggta 240
 ttatttctac tagtgtgtat atggtaaagt cgtgtgctgt gaacctgcta tcaaaaaaaaa 300
 aaaaaaagaa gggaaccacc cg 322

<210> 5315
 <211> 285
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-D5

<400> 5315

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 ggccgggtgt cgtgcctccc ttgcgcgcgc tctcacgacc cagcccgctg tgcgtcatcg 120
 agctccggcg ggccggccat gcacgcgtcc agctagctca cacagcgccg tcgcgaccgg 180
 ctgccggtgc tccaccggc ccgcgtccac atcacggcgg gcgggcgcgc gcggtgaacg 240
 gtttcctccg cgcattgagc tgtgagggtc ggtgggttcc tgcgg 285

<210> 5316
 <211> 145
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-D6

<400> 5316

gggcccaccc aagcgtcagg agatcgccga ggtgtacatt gagtcgctgc caatgaaagg 60
 gaagacgagc ctaggcgacg ccatctaccg tatcatcacc gaagacacgt tcgaccccg 120
 ggagttcttg gacgggatgg acctt 145

<210> 5317
 <211> 439
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-D7

<400> 5317

ggtcaggaat tccccgggccg acccacgcgt ccgggagagg ggaagtcaga ggcacggagt 60
 ggcgcagagc agacgcccgt gaaccattgt agctgtccct gtcgtcgtcg tcgtcaacga 120
 acccacacaa ggaaaggatg gagaagaagc cgaccatcct catgaacagg tacgagctcg 180
 ggcgcacgct cgggcagggc accttcgcca aggtgtacca cggccggaac ctgcggtccg 240
 gcgagagcgt ggccatcaag gtcatcgaca aggagaaggt gatgcgcgtc ggcatgatcg 300
 accagatcaa gcgcgagatc tccgtcatgc gcctcgtccg ccacccaac gtcgtgcac 360
 tgcacgaggt gatggccagc aagagcaaga tatacttcgc catggagtac gtccggggcg 420
 gcgagctctt cggccgcgt 439

<210> 5318
 <211> 223
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-D8

<400> 5318
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 ctccgacgac gacgacgcgc cgccacagcc acatggcgga cgacgccgtc gccgccggag 120
 cggccgtttg ctgcgcatgg ccgggctcgc tgtcttctag caggaatcag tatcagcagc 180
 ccgacgacgc cggctggcgg agcagcagca tcgacgatca cta 223

<210> 5319
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-E10

<400> 5319
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 gccgtggcct caccggctgc tctggccgcc ttcgatgtga tagagatgct ggccgacaag 120
 cccacgtact ccacgttcct gaagctcctg caggacacca aggtcgcggg cgaggcgaat 180
 cagctccggt cggcgacgct actggtcgtc cccgacaaac ttgccaagcc tctggcgtcg 240
 ctgcccgcgcg ataagggtgcg gccggcgggtg gagaaccacg tccttctcag ttacttcgac 300

cccatcaagc tggacgagat gaagacacgc accgccatcc tccccacgct gctctccgctc 360
accgacaaga aactcggcgt cctcaactac accagggccg acgacgggca gatgtacttc 420
ggcgct 426

<210> 5320
<211> 430
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-E11

<400> 5320

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accgccacat cagccatggg cgcttgcgca accaagccca agacgcttga ggggcaggcc 120
ccagctgagg ccgccgtctc cacaccaag gttgcgccc aggccactcc aatctccgtt 180
gaggttgcgg ctgatgaaca ggtagctgag aaggtggtgg tggaggagcc ggctgcggcg 240
gccgacgttg agcatcagaa ggctaattgag gtggtcgctc cagaggcggc cgtcgccgag 300
cccgatcaca aggaggagga agccgtggag aagaccgtcg tcgaggagga gaagccagcg 360
gcagccgcca atgcagagga aaaggtcgcc accgcccgcc agaccacgac gacggtggag 420
gcgaagaaga 430

<210> 5321
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-E12

<400> 5321

ccacgcgtcc gctcaaccga gccatatcca aagttctcaa catcgcttcg tgcagcctgc 60
atcggtcgac gagggctgca cgaacgatgg ggtccgcctc cgcttcagtg acgacaacca 120
gcctgctggc gctggcgctg gcagcgctgg ctttcgtctc cagggcccgcg gcgcagggca 180
acggctgttc cagcgtgatg atgaccctgg ccccgctgcat ggacttcac tccagcaagg 240
cgtcggagcc ggggatctcc tgctgctcgg tgctggccgg agtcgtgcag accgaccccc 300
gctgcctctg catggtactg gacggcactg ccacgtcctt cggcatcgcc atcaaccaga 360

ccaggcgct ggagctcccc ggcgtctgca aggtcaaggc gccgccgctc agccagtgca 420
 caggcgctccc tg 432

<210> 5322
 <211> 416
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-E3

<400> 5322

ccggtctaga attcacgggc cgaccacgc gtccaggcga cagtgcgtgc gtgcagccac 60
 aggcaggcgt cggcaccatg tcttctttca ccggcacgca agacaagtgc gcggagtgcg 120
 acaagaccgt ccacttcac gacctcctca cggccgacgg cgtcacctac cataagacat 180
 gcttcaagtg cagccactgc aaagggatcc tctcgatgtg cagctactct tccatggacg 240
 gtgtgctgta ctgcaagacc cacttcgagc agctcttcaa ggagaccggg agcttctcca 300
 agaacttcac gccagggtggc aagtcttcag acaagggtga actgacaatg gccccagca 360
 ggctatcatc tgcgtattct ggtactcagg ataagtgtgc agcttgccag aaaaca 416

<210> 5323
 <211> 360
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-E4

<400> 5323

ccggtctaga attaccgggt cgaccacgc gtcagcaaaa catggctgtg aatgtgagaa 60
 ccatgtggtc gtcgatgcgg gcacagggtg cgatgggtgt ggcgttggtg ttcttgggtga 120
 gaggcgcatg gtgcggctct cccaaagtcc ccccaggcaa gaacatcacg gccacctatg 180
 gcaaggactg gctggacgct aaagcgacat ggtatggcaa gccgacgggt gccggtcccg 240
 acgataacgg tggcgggtgc gggatcaagg acgtgaacaa gcccccttc aatagcatgg 300
 gcgcatgcgg caacatcccc atcttcaagg atggtcgggg ttgtgggtcc tgcttcaaaa 360

<210> 5324
 <211> 58
 <212> DNA

<213> Zea mays
 <223> Clone ID: LIB148-010-Q1-E1-E5
 <400> 5324
 atgcaaacct ctagagttag tcgtatttagc ttctccgacg tagacggcga ctcttctt 58

<210> 5325
 <211> 367
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-010-Q1-E1-E8
 <400> 5325

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 ggtgccctcc gtccaacggc agcgatccca ttccattggc cagccatctc cgcctccctt 120
 ccacaagaac acctacgcgc ctcccttcca tccaccatct tcacgcttgg atccccctcg 180
 aggcattaga gcttgccatc taccttaggt ctacaacang cacagattac agcangccca 240
 ccatctatct aagaaatcct ccttgtgtaa caccgcgtgg aattccacag gcaaggccgc 300
 caccgcccc ctccaacctc atgcacaggc aaccgtgaag catccacaag caacagttaa 360
 acgtaat 367

<210> 5326
 <211> 457
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-E9
 <400> 5326

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 cgatctcgcg ctaggttttc gccacaccgc tctcgtcctc cgcgaagatg ccgaagaaca 120
 agggtaaggg aggcaagaac cggaagcgtg gaaagaacga ggctgacgac gacaagcgcg 180
 agctcgtctt caaggaagac gggcaggagt atgctgcagg gacccggatg ctgggcaacg 240
 ggcggtgcga ggccacctgc gtggacggca cgcgtcgcct ctgccatctc cggggcaaga 300
 tgcacaagaa ggtgtggatc gcggccgggg acatcgtcct cgtcggcctc cgcgactacc 360

aggacgacaa ggccgacgtc atcctcaagt acatgaacga cgaggcgcgc ctgctcaagg 420
cctacgggga gttccccgaa acgctcaagc tcaacga 457

<210> 5327
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-F1

<400> 5327

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gcgatgataa ggtgatccat ttcacaagag gaagaggaca ggaggtcggg acaggaactg 120
tcgtcgatat tattcttgtg agttccaccc caaaacgaag caacacgcct tgcccgggtg 180
gcaccgacga aaccagcgac agcagcacag agacgaacgg cgtgggtatcc tcctgtctca 240
gctgcttcct agctgggggt gctctctacc gtttcgagta cgcagtcaac ccggcgctct 300
tcctcgccaa agcgcgagga gggacgtgca cgctcgctcc ctctgacct gacgacacgg 360
tggtcgcgg cgccagatac ctgctgagca acggtttcaa gtgctacaac ctgttcaaga 420
gcaactgcc agac 434

<210> 5328
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-F10

<400> 5328

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tggtggacaa aggctgggt agcaactagg acaggggtga gtcagtacca cttgtctcac 120
tggcctagaa tgttcgaggt gatcaggtgg aaggagacgg gctcacacag agatgggagg 180
tgtcgtagaa cgtagacacg ccagagttcc tctcatcgga gtcctactt caaaagtaca 240
tggattttgc agcggacgaa tgctcgcttg gtgtagaagc catggagctc tttggaccaa 300
ggtgacaagg tgaccatctg atcgaccgga tcggccatca cacaggtcgc ataggtgtat 360
tgccatatca agcctatatt attgttgtat tacattggac gcataggga gggaaaaatc 420

cagtggattg t

431

<210> 5329
<211> 263
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-F12

<400> 5329

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tctcaccctc agcgtcgtec tcgtcggcat cgcctccgct gtcgtgtcct tcgctgcgga 120
tgacgcaccg gcagcctcac caaagcattc ggcatccaca tgggtcaaagg catgcaccac 180
gtcgcgcgac aactccgaca atgtcaccac aggggtcttta gaggatggtg cagctaccct 240
gacataagat tcaactgacgg agg 263

<210> 5330
<211> 353
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-F2

<400> 5330

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cctgggttcg attcccctcg ggagcgaatt ttcaggcttg gttaaaaaaa tcccctccca 120
gtattatatt gagaagagac cgaaacatgg tcccggccga gaaaatcctc gaaccctagc 180
cctcaatcac tagcaggcca tcaccgcccc ctctgcaacg ggccaacggc ccagccggag 240
ggtggtgtgc aagatgtaat ccgggagcgg atggggcaca acaagagatt ttttttaacc 300
aagccagaaa ttcgccccca aggggggatc gaaaccggga cctgaaggaa ctg 353

<210> 5331
<211> 191
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-F4

<400> 5331

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 tgtaatctgc aggatctaag caaagacttg atttagttat ggacggattg gtaggcctct 120
 tgaaagtctg cgtgggtccg ggtatcaacc ttgcctaccg cgacgcaaga ggcagcgatc 180
 cgtatgtcgt c 191

<210> 5332
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-F5

<400> 5332

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 tcacctggcg tcgatgctgc tcgacaggct cgccgtgggc tccgaggagg aggaggacgg 120
 cggcgggcaa aagaagcccc acgtcaacca cggcaagttt aaggcggagc cgtggacgga 180
 cgggcacgcg acgtactacg gagggcgcgga cgggctaact gacaccacgg acggcggcgc 240
 atgcggctac aacggcgatc tggggaaaca ctacggcacc ctgacggcgg acgtgggccc 300
 gtcgctgtac accaacggca cctggtgcgg cgcgtgctat gagctcaagg gccccacggg 360
 caccatggtg gtgacggcca acaagcaggc ccagccgccg gtgagcgggc aaaagggccca 420
 acactt 426

<210> 5333
 <211> 344
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-010-Q1-E1-F7

<400> 5333

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 tcggggacgg cgtcgacatc ctgtcgctgt cgcttgacca cgaggatgcc atcgacttct 120
 cggacgaccc cgtctcgctc gccgggtaca cggcgatcct caacggcgtg ttcactctgcg 180
 ccgcggcggg caacaccggc ccgtcncccg cgaccctcgt caacgaggcg ccgtggctgc 240

tcaccgtggg cggccaccac caccgaacag gaggttcttg gccttcgtaa agctagggga 300
 cacggtccat attgacggcg attccctcaa ggaccctaac acaa 344

<210> 5334
 <211> 127
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-F8

<400> 5334

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 atgatctcac catcatgata atcatcggca cctcttcgat atcggtcgca ttgaccctgc 120
 tctgaac 127

<210> 5335
 <211> 383
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-F9

<400> 5335

ccaagcgctc gctgccccaa caagttgtgt actgccaacg ggcctccaa ggtcaccgtc 60
 aaggatgtca ccttcaagaa catcaccggc acctcctcca ccccgagggc cgtagcctg 120
 ctctgcactg ccaaggtccc atgcaccggc gtcaccatgg atgacgtcaa cgtagagtat 180
 agcggcacca acaacaagac catggctata tgcacgaacg ccaagggcag caccaagggt 240
 tgcctcaagg agcttgcatg cttctagacc ctccgtcgac tgacctatct ctctagttat 300
 aatttttctc tcgtccttgc attgccatt agatgctatc cattggtaac gcacaacagt 360
 aaaacgacag acatccgaca gct 383

<210> 5336
 <211> 345
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-G1

<400> 5336

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 aggaaatcag cggccatggc ctcgattccg gcgacgacct tcgccgtcat cttatccgtc 120
 ctcttctgtg ccgcggctgg caccgccgtc gacaacgacc tccccgacta cgtcatccag 180
 ggccgcgtct attgcgacac ctgccgcgcc gggttcgtga ccaatgtcac cgagtacatc 240
 gcgggcgcca aagtgcgct ggagtgcgaag cacttcggca ccgggaagct cgagcgctcc 300
 atcgacgggg tgaccgacgg gaacggcacg tacacgatcg aactc 345

<210> 5337
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-G10

<400> 5337
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 tttttcttag gccgccctct acatttctcg acataaccat cgagagggcg gtcgagagaa 120
 acgagagcgg cagacaccat ggggagctcg aggaccatcg ttgcgtcccc cctgctcctc 180
 ctgcacctcc tcttctggc ttctcgggcc accgccgagg ccgcggttgt ccccgagctg 240
 tttggcgagg accaattcca gcggacatgc aaccagggtgc acttcaggaa gatgtgccag 300
 agcttgacga ggctcccag ggtgaccacg ccgcgcgagc tgetgctggc gtcaatgccc 360
 ttgcgggcgg acaaggcaag ggaggccaca acccggttgg acaagttccc ggcaaggaa 420
 cacgagggcc ggcc 434

<210> 5338
 <211> 428
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-G11

<400> 5338
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 aataaggctc cgcccttttc cgacattcac agggggggaca ggaaatcagc ggccatggcc 120
 tcgattccgg cgacgacctt cgccgtcatc ttatccgtcc tcttctgtgc cgcggctggc 180

accgccgtcg acaacgacct ccccgactac gtcattccagg gccgcgtcta ttgcgacacc 240
tgccgcgccg ggttcgtgac caatgtcacc gagtacatcg cgggcgccaa ggtgaggctg 300
gagtgaagc acttcggcac cggcaagctc gagcgtcca tcgacggggg gaccgacggg 360
aacggcacgt acacgatcga gctcaaggac agccacgagg aggacatctg cgagggtggc 420
ttggtgga 428

<210> 5339
<211> 365
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-010-Q1-E1-G4

<400> 5339

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gccacaagca tgtctggcat catcgacaag atccaggaga cgctccacat cgggggcgac 120
cacaaggagg agcacgagca caagaagggc gaggagcacc acaagaaggg cgaggagcac 180
cacaagaagg acgacgggga gcacaaggag ggcacgtgg agaagatcaa ggacaagatc 240
accggcgagc acggcgacaa gtccggcgac cacaaggaca aagaccatag ggagaagaaa 300
gataagaaga agaagaagga gaagaaccac ggcgagggcc atgaccatgg tgatggtgac 360
ggcgg 365

<210> 5340
<211> 427
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-B7

<400> 5340

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gtgaacaacg actacacgca ctggatcatg tacgccatcg gcggcaacat gaacccacc 120
atcatcagcc agggcaaccg cttcatcgcc cccgacgacc ccaacgcaa ggaggtgacc 180
aagcgggagt acacgccgta caaggactac aaggagtggg tgtggaagtc gcagggcgac 240
gtcatgatga acggcgctt cttcaacgag tccggcgggc agaacgagcg caagtacgac 300

aggttcgact tcattcccggc caagcacggc cgctacgtcg gtcagctcac gcgcttcgcc 360
 ggaccactca agtgcacgt cgccagccg tgctagtaga cagcggcccg gtcgggcaca 420
 tactcct 427

<210> 5341
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-B8

<400> 5341

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 ccgggcaaca actcagccgc cgcaaccgcc acatcagcca tggggcgctg cgcaaccaag 120
 cccaagacgc ttgaggggca ggcccagct gagggcgccg tctccacacc caagggtgcg 180
 cccgaggcca ctccaatctc cgttgaggtt gcggctgatg aacaggtagc tgagaaggtg 240
 gtggtggagg agccggctgc ggccggccgac gttgagcatc agaaggctaa tgaggtgctc 300
 gctccagagg cggccgtcgc cgagcccgac cacaaggagg aggaagccgt ggagaagacc 360
 gtcgtcgagg aggagaagcc agcggcagca gcccatgcag aggaaaaggt cccaccggc 420
 gccgagaaca 430

<210> 5342
 <211> 394
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-B9

<400> 5342

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 ccctagcagc catcgccgcg gtggtcggcg ccacagagac gtactacgcg tccgtggaga 120
 accgccttcc ggcgctgggc atgaagctgg cgtgccacgc gatggggcggg ttcctgacgg 180
 agctcagcgt ggtgccgcgc ggccgtgtgc ccacggcag ggccgggcgc cgcgtcgccg 240
 agctgctggt ggagcgccgc cagcacggct gggttcgctg caactgggcg tacgcgggca 300
 actacgtggc cgggatcacg gtgctggact cgcggtggcc cgaggctggg cgggtgccagg 360

acccccgccgg cgaaagcctg tgccgcgtcg tcct

394

<210> 5343

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-C1

<400> 5343

gtcgacaatt cccgggtaga cccacgcgtc cgcttcggcc tccaactatc accacccggg 60

acgtcttcca tggcctcctc gtagtagaat agttctatct caccgcaaca actcctcatt 120

acatccttta tgagaggctg atcgattggt agatacgtac tcgggtggag cagagcaacg 180

agagacatgg cgacgacgac gcgtgttgcc gccgccgcca ccggcgtgct gctggctctg 240

tcggcggttg cgaccctggc gcggggccgag gaccgcgtacc tggtcttcga gtggaagggtg 300

acgtacggga ccaagtcctt gctgggcgtg cccagaagg tcctcctcat caacggcgag 360

ttccccggcc ccaggatcaa ctgctcctcc aacaacaaca tcgtcgtcaa cgt 413

<210> 5344

<211> 144

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-C11

<400> 5344

cacgcgtccc acatgcatgt atacacatct tgtaacgctg aattttgatt catggcacac 60

tgtactggac gaggatcatt tttttcttgc ctaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa acaa 144

<210> 5345

<211> 452

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-C12

<400> 5345

taccggtcca gaattcccggtgtcaaccac gcgtccagct tgcataatgtg gctcttgaat 60

acgaccagga gctcgagaat gccaaagagca gctcatctgt ggagaagagc tacgagctgc 120
ctgatgggtca ggtgatcacc attggggcag agagggttcag atgccctgag gtcctcttcc 180
agccttcctt cattgggtatg gaagctcctg gcatccatga gaccacctac aactccatca 240
tgaagtgcga tgctgacatc aggaaggact tgtatggtaa cattgtgctc agtgggtggca 300
cgaccatgtt ccctgggtatt gcggaccgta tgagcaagga gatcactgcc cttgcgccga 360
gcagcatgaa aatcaagggtg gtggcaccgc ctgagaggaa atacagtgtc tggataggag 420
gatccatcct tgccctccctg agcaccttcc aa 452

<210> 5346
<211> 327
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-C5

<400> 5346

acgcgtccag cgccactcct tgtaccaggc cctgtacgcc cgcagcgtgg cggacgcccg 60
catccgcccc gcgctccgcc tgctgaagca gaatctgtcg ttcttggtgt ccgtgctcgc 120
ggaccgcgcg catcccgtgg cggtgccgga ggtgatgcgc gcctccttcg aggcgttcct 180
gatggtgctc ctgtcggggc gcaacgatcg gagcttcgtg cgcgccgacc acgccacggt 240
ggatgaggac ttctggagcc tgaggcgcgc cttctccaca tgtggcgaat ggctggtccc 300
caaagacgta gtggcatcgg aggcaaa 327

<210> 5347
<211> 438
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-016-Q1-E1-C7

<400> 5347

attcccgtt caaccacgc gtccatgata aaccgagtgg aatacatgca ttccaaggga 60
tttattcatc gtgacatcaa gccagacaac ttcttatgg gcttaggtcg gaaagcta 120
caggtctata tcattgatta tggacttgct aagaaataca aggaccttca tactcataaa 180
cacatcccg acagggagaa caaaaatctg actggaacag cacgttatgc tagtgtgaat 240

actcatcttg gaatagaaca aagtaggaga gatgatctgg agtctgctgg ctatcttctg 300
ctatatTTTT taagacgaag cctcccatgg cacggtctta aagctggcac taagaaacag 360
.aagtatgaca atattagtga aaagaaaatg cttacgtcag cagaggttct ttgcanatct 420
taccgcgcgg agttcgtc 438

<210> 5348
<211> 439
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-C8

<400> 5348

attccccggt caaccacgc gtccagcacc accacctcca tccgtgcgcc tctcgctctc 60
gctggtggtg ctctctctcc tccacctgt cccggggcgg gcggcctct tttccacctc 120
ctgctggtgc cagggccggg agggcgctgc ggaggtggcg cgcattggggc tcgccgggga 180
cgggtcggcg gacaccgcc acctcagtaa taatgaaaat gggcgggttca tttatggagt 240
tgcgagttct cctggtaaca gagcatcgat ggaggacttc tatgaggcac gaatagacga 300
cgttgatgga gagaaaattg gaatgttcgg tgtatatgat ggtcatggag ggtccgagc 360
agctgagtat gttaagcagc accttttcag caatttaatc aaacacccaa agttcatcac 420
tgataccaat gctgctatc 439

<210> 5349
<211> 396
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-C9

<400> 5349

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gaagatcata cacgaggacg cgttgccggt cgttgctgcg gagaaggaga ctgccgccgc 120
cgccgaacc tcgaaggagg aggaggaggt ggagtcgcc aagaaaggag cggctctgtc 180
gccggtgccg gaggctatcg tcatcgccac agccgaacc tcgaaggagg aggaggagga 240
ggtggagtcg cccaagaaag aagcggctct gtcgccggcg ccggagccta tcgtcatcgc 300

cgccgcctta acctcgaagg acgaggagga ggtggaatcg cccaagaaag aagcggctct 360
gtcgccggcg ccggcgccgg aggccatcgt tgccgt 396

<210> 5350
<211> 399
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-016-Q1-E1-D1

<400> 5350

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gacgtgaccg tgacggcgcc cggggacagc cccaacacgg atggcatcca catgggcgac 120
tcatccggga tcacgatcac caacaccgtc attggcgctg gtgacgactg catctccatc 180
ggccccggga cctccaaggt gaacatcacc ggcgtagact gcggccctgg ccacggcatc 240
agcatcggca gcttanggcg gtacaaggac gagaaggacg tcacggacat caacgtcaag 300
gattgcactc ttaagaagac gatgttcggc gtccgcatca aggcgtacga ggacgccgcc 360
tccgtgctca ccgtctcaa gatccactac gagaatatc 399

<210> 5351
<211> 447
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-D12

<400> 5351

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gaagggtggaa tgcgtggata ttttggtgca agttctggtt tcgtcaatag ctccaatggg 120
cggcaaatag gttcttactt taatggtagt tcaaaccgat taggtagtcc aattgggtat 180
gttggcctta acgatgattc aggatcaata ctgagttcaa tgtctagaaa tgtctggggg 240
aatggaaatc tgaactacat aggcaaccat acaaacatga attcttttcc tcaacctgga 300
agtgggtgggg gtatttctgg tgatgaaatt agttggggaa gccttacttc tgctcatggg 360
atgggcaaca tttcaagcct tggatcagga aaccttggcc gtggaaccgg agataacaac 420

tttggcttgc cttctggaaa ctatgtt

447

<210> 5352

<211> 452

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-016-Q1-E1-D2

<400> 5352

ggtcgacaat tcccgggtag acccacgcgt ccaaacagag cctggacaaa gagagttcaa 60
catgactgga aacttctgga gaaggatcta ccagcgtata tttttgttcg ggttgctgaa 120
gatagaatgg accttcttag ggctgcaatt attgggcca agggaacacc ttaccatgat 180
gggcttttct tctttgatat tcacattccc tctgcttacc cttgtgctcc cccgctggta 240
tattaccact ctggaggact tcggattaat ccaaacttgt ataacaatgg gaaagtgtgt 300
cttagcctgt tgggtacctg ngatggtaga ggttggtgaga agtggaatcc agtcaatcg 360
acaatgctgc aagttcttgt ctccattcaa gctctgattt tgantgacaa gccatattac 420
aacgagccaa gatatgagtc ctatgccaac ac 452

<210> 5353

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-D3

<400> 5353

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gcttgcgcg cgtgttcatg atttcgttat aatatgtggt cgagcgagca gcaacatttg 120
agttgagaag aatacatgac acccgtgtca actaaccgca tcatttttta gttgatgggt 180
cttatgccat ggaaattcaa cggatgttac agccttttcg taatagatca tgttaaaaag 240
cacgtgactt ttatcgactt tacaccgacc caagattggt ataagcacat gccatacaag 300
aggttcgcag aagcgattat catggcctta aagaaatata agattaccta cagcaagaaa 360
tgttctggat gggaaagagg atattttaag tgaaaacata ca 402

<210> 5354
 <211> 423
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-D5

 <400> 5354

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 tcatcgacca cgcccccttc caggctcccg tctccatggg tctcctctca aacaggattg 120
 ggagggagag cctcaaggcg ggggatcata tctactcttg gagggcggcg tgggtctacg 180
 cgcacacagg aatatatgtg ggcatgata aggtgatcca tttcacaaga ggaagaggac 240
 aggaggtcgg aacaggaact gtcgtcgata ttattcttgt gagtctcacc ccaaaacgaa 300
 gcaacacgcc ttgcacgggtg tgcaccgacg aaaccagcga cagcagcaca gagacgaacg 360
 gcgtggtatc ctctgtcttc agctgcttcc tagctggggg tgctctctac cgtttcgagt 420
 acg 423

<210> 5355
 <211> 419
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-D6

 <400> 5355

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 acggcgatgg aggcgagagc ggccatgagc tgggtactgcg gctcccttct ggccgtggcc 120
 atcgcgtgtg tctgttccgt gtccctcggc gtgcgcgccg ccggcgccgg cgcgggcgtt 180
 gacatcaagg tgtcgtgtgc agcgacgccg gaccgggacg tgtgcctgcg cgcgctccag 240
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 accgcgggcg gcgcggcggg cgactacgcg cggcacgaga tggacgttgt gaaggacaac 360
 gacatgtggc agtgccctgaa cgagtgcgcc ggggagatcg acgaggggct ggaccacct 419

<210> 5356
 <211> 444
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-D7

<400> 5356

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cgaccgccac atctattagg tgcagccatg ggtgcctgtg caacgaagcc taagacgctt 120
gaggggaaag cccagctga ggccaccatc tccacacca aggttgcacc tgagaccact 180
accatccaca ttgaggttgc ggcaaaacat gcagtagttg agaaggtgga ggaggacaag 240
gaggaggcac taacagtggc ggcgaaacaa gagccagcag ccaccattga gcctcagcag 300
attgctagtg aggtgaccac ttcggaagtg gcggtcgtcg ttgtcgagcc tgagaacaaa 360
gaggaggagg aagttgtgga gaagaccgtc atcgagaagg agaagccatc agcagtccat 420
gcagaggaaa atattgccac caac 444

<210> 5357

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-D9

<400> 5357

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gttgtccccg agctgtttgg cgaggaccaa ttccagcgga catgcaacca ggtgcacttc 120
aggaagatgt gccagagctt gacgaggctc ccgaggggtga caacgccgcg cgaactgctg 180
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ttcgcggcga ggaaccacga gggccggccg atggagtcca tcctcggagc ctgcagcaac 300
gggtacgaca acgttgtgca gacgctcgag gaggcgcgga agatcgtcgc cacgcggccg 360
gcggcgggca cccaggccca ggccgacgac atgaac 396

<210> 5358

<211> 395

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-016-Q1-E1-E1

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cgaggatatc cagccccctcg tctgcgacaa cggaactggc atgggtcaagg ctgggttcgc 180

tggcgacgac gccccgaggg ccgtcttccc cagcatcgtg gggcgccgc gccacactgg 240

tgtcatggtc gggatggggc agaaggacgc ctacgtcggc gacgaagcgc agtccaagag 300

gggtatcctg accctcaagt accccatcga gcacgggatc gtcagcaact gggacgacat 360

ggagaagatc tggcatcaca cttctacaa cgagc 395

<210> 5359

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-E11

<400> 5359

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ggcttcaacg gcatctccca cagggacccc gagacccccg tgaagctcgc tgaatacttc 120

aacgtcaccg acgggggtgtt cagctacaac cagatgggag acgtgcccc cgcctgaac 180

ggccccctcc atgtcatccc caatgtcatc accgcccaggt tccgcacctt catcgagatc 240

gtcttcgaga accccgagaa gagcatagac tccctccacg tcgatggcta cgccttcttc 300

ggcgtcggga tgggccccgg gaagtggctg ccggagggtga ggaagacgta caacctgctg 360

gacacgggtga gccggcacac gatccaaagt gtac 394

<210> 5360

<211> 461

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-E12

<400> 5360

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ccacgcgtcc ggcaaccgtg tgccttttgg agacgcgatg tcgtccggca acaagatcag 120

cgtggccttg ctgagcgtgg ccctagtggg cctgctcctc tgccacctcg ccaccaccgc 180
 ctccgcccac cagaaagaca tccacgtcct cggcagcgtc gacgggtcca gcgacggcag 240
 cagccccgag tccgaaggcc gcgtcgtcta cgcggacatg aagctggctg atacggaatc 300
 cgatgcgccg gcgcggcgcc cggcgccggg gccgtcgtcc ggttgaactg agaagcgtgc 360
 gtccagccaa gcaaggtggg caaaaccgag aactaattaa gggctcgatc gtgtgtcagg 420
 ctactactgt tcttgccata attatatata gatacgcaaa g 461

<210> 5361

<211> 459

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-016-Q1-E1-E2

<400> 5361

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 ctactgcgcc cccgagtacg ccatgaccgg caagctcacc aagatgtcgg acatctacag 120
 cttcggcgtc gtgctgctcg agtcattcac cggccgcgcg gccatcgaca tggccaggcc 180
 gtccgaggag caggctctac ttaactgggc ttgcctctg ctgagagaca agaggaggtt 240
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 gctcgccgtc gcgtccatgt gcctgcagga ggacgtgcc agccggccgg ggatcagcga 360
 cgctcgtcgg gcgtctctct tctcgcgccg accgcantac taccctcccg gaggcacnng 420
 agctgaacac aagagcacgc atagcgggac agacaatga 459

<210> 5362

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-E5

<400> 5362

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 gccatcatgc gcctgtcgtc cctcctcctc gtctgtggccg cctctctggc gcgcgccggc 120
 gggcagcagg tgccgccggt gggcggcagc gctctgaagc cggactacta cagccagtcg 180

tgcccgcgcg cggagaggat catcgcgag gtgatgcaga cgaagcagat ggcgaacccg 240
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gcgtcggtgc tgatctcgtc caccagttc cagaagtcgg agcactacgc ggagattaac 360
tactcgctcc ccggggacgc cttcgacgcc gtggtgcgcg ccaagctggc cct 413

<210> 5363
<211> 414
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-E6

<400> 5363

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ggatcccccc acacctgag acctgcgtt tcaccaccc atcgagggtg gggccgccag 120
caggttcagc cgttctgtt cttgataaaa cgagagaagg atggcagtgt ttcagggagc 180
tgtcctattc ttgtttctcc tctcgtcgc agcagagggtg ggaaccatcg atgccaaaat 240
gggagtagcc atgcccacgc atgccttgat aatggagaaa gcgaaacagc aggagacgga 300
gaagaaggag gagaaaagca cggagaagga agagagtcaa tgcttatcgc cgagtctcca 360
gttcgagggc ttctgcttca acagcgacag atgcgccgag gtgtgcatga aaga 414

<210> 5364
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-E9

<400> 5364

gtattgtcct agcttcggg tcgaccacg cgtccgacgc ccttttttta tttttttct 60
cacaatggga aaaaaacatt ctgaagtaaa caactttttg gaccacagtt ccaccgtcca 120
gtgactactc tcttatgtac tctgatgaat gtctgactaa tgatagatgg tgcaatgctg 180
catagggcac aaatccaaga acacctcgta tacaacaacc taataacgaa tcagccaaaa 240
aaaaattaac cagaagacct tattagtcaa tcttgaggtc gttgcacgat caaagattgg 300
gcgactctct ctttgattct taactctttc ttgttagtca atcttttaggt tgcaccatcc 360

aatgaatgct gacgatgtat atgtacgtgg cggttaatgg atgcccttgg gccgtcttcg 420
catgcatggg g 431

<210> 5365
<211> 376
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-F1

<400> 5365

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atggcacgct ctgtcccat cgcgcctctg ctctgtctcc cctcctcct cctcctcgtc 120
tccactgctt ccgctgcacg gaccgtgggc gacaccgtgc aggacgcgtg cagcaagaca 180
caattcccca agatctgctt ggacagcctc accgcaaagc cagagagcca gaaggcgacc 240
ccgcgccggc tggcggagct gttcgtgaac atcgcggccg agaagggatc cgggatggcc 300
acgttcgtgc acgggaagta caacaacgcc aaggacagca ccgtgttcaa gtgctacgac 360
agctgctcgg acgacg 376

<210> 5366
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-F11

<400> 5366

ccacgcgtcc gaacagacca caaaggaggg gacacacaca cacacacacc gtctccgccc 60
gcccgcgcg acgcgccatg gctatggctc gctccgtcgc gcacctcttc tttcccatcc 120
tccttatctc caccgcgccc gccgtgcggg ccatcaccga cgcgcgcggc ggccccgat 180
acctccagga ggcgtgcaac aagacgtgtt tccccaaagg gtgcatgcac gcgctcaagg 240
acaaccaga gtgccaggcg gagacggcgg tcacgccgcg ccggctggcc gagctgctcg 300
tgtacgtgtc ggccgagggt ggcatgaccg tggccgcgtt cgcgcaccac gagctcaacg 360
ccatcaagga cgacgacgtc ctgtacaagt gcatcgacac ctgctccgaa gacat 415

<210> 5367
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-F12

 <400> 5367

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 ggacaggaaa tcagcgggcca tggcctcgat tccggcgacg accttcgccg tcactctatc 120
 cgtcctcttc tgtgcgcggg ctggcaccgc cgtcgacaac gacctccccg actacgtcat 180
 ccagggccgc gtctattgag acacctgccg cgccgggttc gtgaccaatg tcaccgagta 240
 catcgcgggc gccaaaggta ggctggagtg caagcacttc ggcaccggca agctcgagcg 300
 ctccatcgac ggggtgaccg acgggaacgg cacgtacacg atcgagctca aggacagcca 360
 cgaggaggac atctgcgagg tggctcttgg ggagagcccg cgcaaggact g 411

<210> 5368
 <211> 381
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-016-Q1-E1-F3

 <400> 5368

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 cggagtgggg caacgcgggt cggggcgact ccggcagcta caaggactgg ccggaggaca 120
 cgggcttctt ccggcgcgag ggcggctgga gcacggagta cggggagtgc ttcattgagct 180
 ggtactcgca gatgtcctg gagcacggcg agcgcatcct gtcggcggcg acgggcgtgt 240
 tcacggggtc ccccggcgtg aagatctcgg tgaagggtgg cgggatccac tggcactacg 300
 gcacccggtc ccacgcggcg gagctgacgg cggggtacta caacacccgg tcgcacgacg 360
 ggtacgcgcc catcgcgcg a 381

<210> 5369
 <211> 434
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations

<223> Clone ID: LIB148-016-Q1-E1-F5

<400> 5369

gtaccggggc acaattcccc ggccaaccca cgcgtccaaa cgagagggca ggagcagccg 60
cagtccccgc gatccccgcc ccggtcgccc tcacacctcc tcgtcactgc cttcgtttct 120
ctttccaaca atcaagatga gccgtggcgg tagcgcgggg ggtgggtcaaa gttctctggg 180
ttacctcttt ggaagcgggt agccccccaa accagcagtg gcaccaccag ctgtaagtgc 240
tccacctgct gctgcagggt ctccacctgc tgagaaacca cctgctgcaa agcctgatgg 300
caccagtcag attgctgctg gggttaccag ccaaaccaat aactatcaca gggctgacgg 360
tcagaacacc ggcaacttcc ttacggaccg ncccttcgac aaggtccacg ctgctcctgn 420
cgggtggctct tccc 434

<210> 5370

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-F7

<400> 5370

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ggctggaagc ggaagcattc gatttccatc gtggggcatg gcggcggagg ggaagaggaa 120
gggcgtcccg gcgctagggg ggtggctgat gctagtcggc tccctccgcc tcgcctccgt 180
ctggttcggc ttcttcgaca tctgggcgct ccgctcgccc gtcttctcgc agacggagat 240
gactgatgtt catggccgta catttgggtg ctggactctt ttgacctgca ccctgtgctt 300
cctttgcgca ctgaacctgg aaaataggcc tttgtacctg gccaccttcc tatcattcat 360
ctacgtctct ggtcatttcc tcacggaata cttgatatac cacaccatgc ctgcagcaaa 420

<210> 5371

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-F8

<400> 5371

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agagccttgt tctcctgtgt cctcttctgc atcgtgcatg gtgagaagga agagtcaaag 120
ggcatcgatg cgaaagcgtc cgggccttgt gggtccttcg acatcaccaa gttgggcgcc 180
tccggcaatg gcaagacaga cagcacgaag gctgtgcagg aggcattggc atcggcgctg 240
ggcggcactg ggaagcagac aatcctcata cccaagggcg acttccttgt cggacaactc 300
aacttcacag gcccttgcaa gggcgacgtg accatccagg tggatggcaa tctgctggcg 360
accacggacc taagccagta caaggacat ggtaattgga tcgagattct acgcgtggat 420
aacctggtea tcaacggcaa aggaa 445

<210> 5372
<211> 401
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-016-Q1-E1-F9
<400> 5372

tccgggtcga gccacgcgtc cgatcctacc ccaccacca cccgtcgacg ccggcctctc 60
tcctcaccgg ctcgagaggt cggagcccg cggccggagg gcgacgtcgt ccctaataaa 120
tactaataat ttatcactat acataaccaa tatataagcc atgggcaagc gcagcgtccc 180
tcggtaccct gaggacgagg acaaaggcgg ctgctgcggc tgctgtgct ggtgctgctg 240
cttcctgttg ttcacgtgg cggcgctggc cggcacggcc gcctacttct tcttcgtgta 300
caagcccaag gcgccgtcct actccgtgag caacatgtcc gtctcgagc tcgacttcag 360
cacctccgac ctgacgctgt acgtcaagct caacgcctcc g 401

<210> 5373
<211> 260
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-016-Q1-E1-G11
<400> 5373

ccgggtcgac ccacgcgtcc gatttaaatt ctcgacaaaa ttgtttgac cacggtgatc 60
tgtcatatat gtcgtccatt gatttgtgtt aatttgacaa aagacgttga aaagaagctg 120

cactactcta ctgtgcatca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaggaaga 180
ggcacaagaa gaataagact ttaagtaaac gtacatgaga agtcaaagtt ctacgacatc 240
gtcaccgaaa ttcaattcaa 260

<210> 5374
<211> 228
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-G12

<400> 5374

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acatcctggg gcttattgaa tgaatgttat ctcggttact aaatgattgc catggattat 120
tcgtcaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaaa ggaagaaaaa caaaaggaat aaaaacttaa aataaaca 228

<210> 5375
<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-G2

<400> 5375

gtcaaaaatt cccgggtaga cccacgcgtc caatccgagc taagtaatta ggtcgaaaat 60
gacccgtgcc agcagcagta gcagcagccg gcgtgtgacg ctggtactgc tcggtctccg 120
cctgctgctt ctggttggtg ttgcgcaggc ggtagtggag ttggtgcctg ctgatgataa 180
tatcgccgcc gccgtgctg gcacggcggg ggacgatggc gagccgcctc agcagtgcgc 240
gaccccggtg agcgtggagg aggcgtgccg cggcgcgtcc gagacgcacg ccggcgtggc 300
ctacgaccac tgcattggct cgctgggcgc cgacccgcgc agcaaggagg ccggcaacaa 360
gaacatgcac gggctggcgg tgctggccaa caggatggcc atcgaccacg ccggcagca 419

<210> 5376
<211> 413
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-G3

<400> 5376

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agggccgtct tccccagcat cgtggggcgc ccgcgccaca ctggtgtcat ggtcgggatg 120
gggcagaagg acgcctacgt cgggtgacgag gcgcagtcca agaggggtat cctgaccctc 180
aagtaccca tcgagcacgg gatcgtcagc aactgggacg acatggagaa gatctggcat 240
cacaccttct acaacgagct ccgcgtggct cccgaggagc acccgtcct cctcaccgag 300
gcgcccctga accccaaggc taacagggag aagatgacc agatcatgtt cgagaccttc 360
aacacccccg ctatgtacgt cgccatccag gccgtgctct ctctgtatgc cag 413

<210> 5377

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-G5

<400> 5377

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aactggaaaa ccgttgacaa atgttggtgc agttggaata ggtggtagct ttcttggccc 120
tctatttgtg catactgcac tccagaccga tccagaagca gcagaatgtg caaaaggccg 180
gcaactgaga ttcccttgcaa atgttgatcc agttgacgtt gcacgaagca ttaaagattt 240
ggatccagaa accactctgg tgggtggtgt atcaaagaca ttcacaacag ctgaaacaat 300
gttaaagtct cgaactctta aggagtggat cgtttcttct cttgggccac aggctgttgc 360
caaacatatg attgctgtca gcactaatct taagcttgtg aaggagtttg gaattgacc 420
aaacaatgc 429

<210> 5378

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-G6

<400> 5378

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 gtgtacgcgg atttcacgc ccacgaggcc atctcgtcga gcgtggccga gttcagctgg 120
 gacctcaagt tccccgggcg gcaggtgctg ctggccgagt tcaacatgac ctccggcgggc 180
 ggcgcgcaga atttcaagtc gcaggcggac aacttcgtgt gcgcgggtgct ggcggaacacg 240
 gggttccacc aggtgttcat cccccgggc ggcgatgcc aactccggga cggggccaac 300
 tcgcaatacg ttgacagcaa cgcgttcctg ctggtggtgt acgcgggact gctgctgccg 360
 ccggggcaaa ccgtgctgtg cgggaaccaa gcgctggccc c 401

<210> 5379

<211> 452

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-016-Q1-E1-G7

<400> 5379

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 atccatggcg tcaagtgcgg ccagggccac ggcatcagcg tcggcagcct ggggcgctac 120
 aaggacgaga aggacgtgga agacgtgcag gtgacggggt gcacgatcgc cggcaccacg 180
 aacggcctgc gcataagtc gtacgaggac tccaagtcgt cgtcaaggc cagcaagttc 240
 ctgtacgagg gcataccat ggacaatgtc tcctacccca tcatcatcga ccagaagtac 300
 tgccccaaca acatctgcgt caagtccggc gcctccaagg tggccgtcaa cgacgtcgtc 360
 ttcaagaaca tccacggcac ctccaacacg ccggaggcca tcacgtcaa ctgcgccaac 420
 aacctgccat gccanggcgt gcagctcgtc aa 452

<210> 5380

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-G8

<400> 5380

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 tcatcccaa gggcgactac ctggtgggcc ctctctactt cagtggcccg tgcattggggg 120

acatcaccat ccagctcgat ggcacccctgc tgggatccaa cgacctggcc aagtacacgg 180
 cgagttggat ccaggtgtcg cacgttaaca acatcgatcat caacgggtcc ggcacgctcg 240
 atggccaggg caccgcagta tataccaaga gcaagaccga cgtcgtcaag gcgatgcccc 300
 acacactagt gttgttctac gtgaccaacg gcaactgtttc cggaattaaa ctactcaact 360
 ccaaattctt ccacatcaac atcgacactt ctaaggacat caccgtgaag gatgtgaaca 420
 t 421

<210> 5381
 <211> 402
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-G9

<400> 5381
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 caccacccca tcaaggttgg ggccgccagc aggttcagcc gttcctgttc ttgctaaaac 120
 gagagaagga tggcagtgtc tcaggagct gtcctattct tgtttctcct cgtcgcagca 180
 gaggtgggaa ccatcgatgc caaatggga gtagccatgc ccatgcatgc cttgataatg 240
 gagaaagcga aacagcagga gacggagaag aaggaggaga aaagcacgga gaaggaagag 300
 agtcaatgct tatcgccgag tctccagttc gagggcttct gcttcaacag cgacagatgc 360
 gccgatgtgt gcatgaagga gagctttccc ggtggcgagt gc 402

<210> 5382
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-H11

<400> 5382
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 cgttttagaa cctggctctg agtaagtgcc atttcagctt cagctcataa cgtcagacgg 120
 tacgcgacgc aacctacca ccaatttctt cttcttcttc ttcagtgtta atttattaga 180
 atcatcatgg tggaatgaac acaagaaaga acgggacgga ctagcagtaa ctaaagaagc 240

agcagggatt gaatcgatcc ttctccttgt tcttggttcc gtccgccggg cggctctaggc 300
ctattttacaa aaatattaca gcagcagcag ccgaatagct gaccatccaa tccaattcat 360
aggtcctttg tgctggcggc gccgctgcct tcgtcgacgc cgcgcttgcc gtagcaatga 420
agaag 426

<210> 5383
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-H12

<400> 5383

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cgacattcac aggggggaca ggaaatcagc ggccatggcc tcgattccgg cgacgacctt 120
cgccgtcacc ttatccgtcc tcttctgtgc cgcgggtggc accgccgtcg acaacgacct 180
ccccgactac gtcattccagg gccgcgtcta ttgcgacacc tgccgcgccg ggttcgtgac 240
caatgtcacc gagtacatcg cgggcgcca ggtgaggctg gagtgcaagc acttcggcac 300
cggcaagctc gagcgtcca tcgacggggt gaccgacggg aacggcacgt acacgatcga 360
gctcaaggac agccacgagg aggacatctg cgagggtggc ttggtggaga gcccgcgc 418

<210> 5384
<211> 438
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-016-Q1-E1-H2

<400> 5384

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caaggcacac gtatgtctcg cgcgctcgcg cttgcgatcc tcttcctggc cgccgccgcc 120
gcggtggcgc cgctggcctc cgccggcacc gangagttca ccagcgtcgg gtccagcggc 180
ggcaagatgt tcgacagggc ggtcggagcc gatcccgacc cgtccccggc cggcggactg 240
ccggccgacc cggcgccga cgcacgcccc taaggccacg cacgcaccgt cgtacggccc 300

cgtttccgtg tacgcttcac gcgctggtac tctcgccgcc cgtttccgtc gcccctaaga 360
 cgtagtatgt tcatgaacac gacgcgcctt gtacatgtct ctggaatgtg cagcctgcat 420
 gtgttntgct tgcgagcg 438

<210> 5385
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-H3

<400> 5385

attccccggc caaccacgc gtccgcccac gcgtccgaga cgcgccgcc tcccctcgcg 60
 ttcatlgatt tctgttataa ttactaccga gctactatct ccacattatt attggtaaag 120
 aaagaaaggg cgcctcctct aatttgatgg gcattccgtt tccttctcaa cttcaacgcc 180
 aacaacagtt gatgctacta tggttggaaa tcgggcatgg ttcggagggc ttttcagcgg 240
 ctcaggcaaa aggcgacaag tcagtgcaga gaagatagtg cttgatctaa cccctgtaca 300
 ggaacagaga ctgcaaagtc tgaaggaaag gctaaatgta ccttacgacg aaactcggac 360
 ggatcatcaa gattcgctta aggtcttatg gaatgcctcc tttcccgata cagagctcac 420
 t 421

<210> 5386
 <211> 448
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-016-Q1-E1-H5

<400> 5386

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 ccggccccgcc gagagctagc tgctgatcgg tcgaggagag tcatggcgac gtcgacgatg 120
 cgcgttgccg ccggcgtgct gctggtcgtg tcggcgctgg cgaccttggc ccgggcccag 180
 gacccctacc tgttcttcga gtggaagggtg acgtacggga ccaggctcct gctgggagtg 240
 ccccagaagg tcatcctcat caacggcgag ttccctggcc ccaggatcaa ctgctcctcc 300
 aacaaacaac tcgtcgtcaa cgtcttcaac cagctogacc atccgctcct tttcacctgg 360

aacgggatgc agcacaggaa gaactcgtgg atggacggga tgccaggcac gcagtgcccc 420
atcgcgccca acaccaactt cacgtaca 448

<210> 5387
<211> 451
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-016-Q1-E1-H8

<400> 5387

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ggcgacaaga tgccacgcgg cggcaagccc gcggttcgt cgaagccgaa cccgttcgac 120
tcggactcgg actcggagtc cagcaataag cgggcgaaca agtccggggc gtcgtcgtac 180
caggcccccg ccgacgcaa gaagcgttac aaggacgggt tccgggactc gggcgggctg 240
gagaaccagt cgggtgcagga gctggagcac tacgcggcgt acaaggccga ggagacgacg 300
gacgcgctcg ccggctgcct gcgcatcgcc gaggacatca ggcaggacgc cagcgacacg 360
ctgatcacgc tgcacaagca gggggagcag atcagccgga cgcacgagaa ggccgtcgag 420
atcgnacagg acctcgcaaa gagcgagacc c 451

<210> 5388
<211> 299
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-F10

<400> 5388

aattcccgcg tcgaccacg cgtacggcta gttcaccac tggatttcaa gtcctgcg 60
gcagccatat ccagagtcag ctgacatggt caaccggttg tgaaaagcgc acaacctccg 120
gcaccagttt ccttttcgtt tccccttttt tgcacataaa attgacaagt cgctgaaatt 180
gccagttttc ccctcttgga ttatgtcggg taaaatgcgt atactcttcg gttttggaga 240
tatatgtcta gactctagag cgtgagggaa gggtataaag tcttgtatgt ctttgttca 299

<210> 5389
<211> 336

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-021-Q1-E1-F11
 <400> 5389
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 atcctctaga ctatgataac tcccctgata cttttgtcta aaaaactatc ctcaagatgc 120
 atcaaaatct tcaagctgtc cactttgatg atcttggaca tttttgctgg atggcttgaa 180
 tttgttaaaa aaatgtcatt gttaaataac ctggtgtaac tgtcagctat aatcacagcc 240
 tttcatttcc cccctttggt tgtcatgcct tgtaactact cgcctgtctt tgattgttgt 300
 tgtattgtcc cattgaaagg acatgtgtat tataag 336

<210> 5390
 <211> 424
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-021-Q1-E1-F12
 <400> 5390
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 gccatcatcg agaaggcctc gtcggctctg gtcgcgctcc acattcccg gttcacccat 120
 cggaggttac ttggcaacga cgaagaagga aacatggaga atcaacccaa agtcaaacac 180
 tcgggtagta cgttctctgg cgagctcaaa gacgacgtca cggcggccga caaccgcagg 240
 ctgctcaacg tcgacgaaga agaaaacatg gagaatgaac ccaaagtaca aactcgggt 300
 agtacgttcc tgggcgagcg cgacgacgac gtcccgagc cgcacagccg gaggtactc 360
 agcattgagg aagacacccc gcagtgggtg aacggaccag agaggccgct gctcaaagcc 420
 aact 424

<210> 5391
 <211> 324
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-021-Q1-E1-F2
 <400> 5391

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aacagacgag gccaacacag ttcaaggatc cccaaagtaa cagtggcttc agcagctctg 120
gaaaccaggc acgcttcagc acaggtaaag aatcatttcg gatgcatttc ttccacgggc 180
aatctatattt tacaagtttg agcaacatct cctactacc aagtgtcacc ctcccctgag 240
cacgttttgt cccctttaa aactacgaac agaattagaa cctattctct tcttgcggtg 300
ttccacggac gggcgacgaa tatg 324

<210> 5392
<211> 369
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-021-Q1-E1-F3
<400> 5392

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ccccttgggc acggcctggc ggatggcgta gatctgcgac gtcttcccgc cgcctcggac 180
gcggatcctc atgtcgatgt ccttgaacct ggagcgcccc gccagcagga tgggctcgaa 240
ggccttgagg cggagcatct ccggcctgat gagctcaatc gggacgccgt tcaccttgat 300
cagcccgcgc cccggcttgg tgtaggcgac ggccacagcc gtcttcttgc ggccgaagca 360
ctggaccgt 369

<210> 5393
<211> 396
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-021-Q1-E1-F5
<400> 5393

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aacaagattg gatatcagct gccatggagg gtgctagcta ttcagtctta gcgacgtcat 120
caagctccaa ggccacagca ccaacaaatg cattttgttg ctgctgttcg tgccttttgt 180
acacatgcta acacataatc catgtcattt gtgaagagaa gctgccatgg acagtgactt 240

catccacaat attatgtgga tggcggcagc tggagatggt aggccccgat cgaatgggtga 300
tcagcagatg agacttgctt gggcttttct ggcactcgta gttcttttget gtctgtaaca 360
tctttctcaa tgtacgttat catgtgcatg tgcaac 396

<210> 5394
<211> 379
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-021-Q1-E1-F6
<400> 5394

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gccacatcta ttaggtgcag ccatgggtgc ctgtgcaacg aagcctaaga cgcttgaggg 120
gaaagcccca gctgaggcca ccatctccac acccaaggtt gcacctgaga ccaactaccat 180
ccacattgag gttgcggcaa aacatgcagt agttgagaag gtggaggagg acaaggagga 240
ggcactaaca gtggcggcga aacaagagcc agcagccacc attgagcctc agcagattgc 300
tagtgaggtg accacttcgg aagtggcggg cgtcgttggt gagcctgaga acaaagagga 360
ggaggaagtt gtggagaag 379

<210> 5395
<211> 72
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-021-Q1-E1-F7
<400> 5395

ccacgcgtcc aaaaaaaaaa acaaaaaaaaa ataaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaaaaaa aa 72

<210> 5396
<211> 415
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-021-Q1-E1-F9
<400> 5396

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 cgcttgggtg gtggcgctgg cgctgggtgt ggctgctgcg ctgctccagc cgcggccgtc 180
 cgacgcgcgg gcgcagcccc ccccgagtc gccggcgacg gcggtgtcgt cgggcgcgcg 240
 caagcccaag tgcgtggccg gcgccaggaa cgaccacgcg tgccgcgtcg gcgcctgca 300
 cgacccggac agccaggagg aggagggctc cagcgtcacc atcgacgcg cgcgcgcgcg 360
 gcccgcgcac gtcggccacg acgacggcag cgactacaac gaccccgacg tgccc 415

<210> 5397

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-G10

<400> 5397

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 ctctccacc tttctccttt tcttgccacg gcaaaacacc ttgcggcg agagcatggc 120
 gatggcgtag cgtgtcctgg aggtcacctt ggtgtcggca aatgacctca agaaagtgtc 180
 gcttttctcc cggactcgca tctacgccgt ggcttccatc tccgattcg acctccgcat 240
 cccttccac agcacccaag cagaccacag caacggctgc aaccttgct ggaacgccgt 300
 ggtacacttc cccatcccgg ctgccgtga caccgcggc ctgcactcc acgtgaggct 360
 ccgcgccag cgtctatacc tgggcgatcg cgacatcggc gaggtgtttg tgcccatcga 420
 cgacctcctg gccggcgc 438

<210> 5398

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-G11

<400> 5398

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 ggatgccaag gtgcgcgtgg ggcttcttcc acgttgtcaa caacgactac acgcactggc 120

tcacgtacgc cattggcggc ggcgacgcgc caaccatcat cagccagggc aaccgctaca 180
tagcaccacc aaacatcgcc gccaaagtga tcaccaagca ctacgcggaa gaaggcgtgt 240
ggaagaactg ggtgtggcac acggaggacg acctgttcat gaacggcgcc atcttcaatc 300
cgtccggcgg cgcccccaag caggctcgaca ccaacgagtg ggtaaagccc aagccaggaa 360
cctacgttac aaggctcacc cgcttctccg gcacactgtc ctgctgcacg ggcaa 415

<210> 5399
<211> 368
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-G12

<400> 5399

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cagtagcccc ccggcggagg aggggggagcg gcgggacgag agcgagagcg acggggagat 120
ggcggggctg gcggccgtgc tggacttcga catgctgtgc gcgtccgtgg cgctgtcggc 180
ggagaggagg aaggccggcg cggcgctggc gggcgcgccc ggcgactgcy gcggtggagg 240
cggaggggtg cagaggatgt gggagggcga cgtcgtgctg gattgcctac acgaccggcg 300
attcgcgtc gagacgtcct gctgcccatt ctaccggttt ggtaagaaca tgcggcgagc 360
caatctcg 368

<210> 5400
<211> 350
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-021-Q1-E1-G3

<400> 5400

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ggtggaaacc tcaccggggt gcttcaacga acgcgaagggt gtcgctgtca tttagcgcgt 120
cttgattgga tttgacctgt tggcctgntg gcgtgttgtc gttgattgag ctcgaggatg 180
atgaaatggg ggctcagcag cggcacgccc gcggattcct actacgaggt acggtcagat 240

tgcacggacg gtgtgcccac gagcaagttc aagatcaagg ctggcaaac attaatgtct 300
 cggaaatggc aggctgcatt tagtcccgat ggctgtcttg atattgcctc 350

<210> 5401
 <211> 357
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-G4

<400> 5401

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 ctggccaact ggtcctcacc cccaaaattg gcaacatctc cgaaattgaa attaaagagc 120
 acggttgcca tgacttcccc tttgaactca aagaaggccc gggccggaac tggacgcttg 180
 acacaaaggg ccactcaaa gtacccctct gcaatcgctt ttgcaacaaa tcctggcgct 240
 accgcatcgc cgatgatgtc atccctgaaa attttaaggc cgacaccacc tacaagacca 300
 acctcagcat ctgatcatcc tcttatgagg aataatattt tgaaagagct catctga 357

<210> 5402
 <211> 375
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-021-Q1-E1-G5

<400> 5402

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 actcttgctg gaactccttc tcaagcacta taccatattc cgcgtccttt cttgaaatcc 120
 aaggacaacc ttttggttgt cttcgaggag gagatgggca agccggatgg catcctcgtg 180
 cagacggtga cgagagacga catatgtctg ttcattctcg agcacaaccc gggacagata 240
 aagacgtggg atacggatgg tgacaaaatc aaactcattg cagaggatca cagcangcgg 300
 ggcaccttga tgtgcccccc tgagaagaca atccaagaag tcgtctttgc cagcttcggc 360
 aaccaagag gcatg 375

<210> 5403
 <211> 453

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-021-Q1-E1-G6

 <400> 5403

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 cctccgactc agcatggctg ccgtcgtcct ggctgccatc gccacagtag tgctcgcgga 120
 ggaagccgat ccgcgggcac tgccggcaca gtggaccacc gcgaagaagt acaaggccac 180
 gatggacgcc aagacgcggc aggctttcga cggcgtgggt gccgccgcta cggcagagaa 240
 gcggtcccag gcggtggagg ccgtgctgca gcagcagctg aacatggacg tgtcctctgtc 300
 caaggcgacg tcttccgggg acgagaacaa ctacgtgagc gtggccgccc cctacgagaa 360
 ggccgcgggc gccgtcatcg cggcgacgcc ggacaacaag ctccgcgcta tggcggctgc 420
 gttcgacggc gcggtggcgc cggacccggg ccg 453

<210> 5404
 <211> 395
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-021-Q1-E1-G7

 <400> 5404

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 ctgaaagcac aatatgtgaa gaaggagac tacgtcactc ttgttcagag cggagtgact 120
 tcaatctgga tagaggaatc cactcaccac atccaaatga ggaaagttca ggtctgatgt 180
 gccggtggga attggctcgtc tgagaaattt tgatagcgcc gcctgatgtg ttatcatcat 240
 tatatgtgta attttactgt ttaccaaga gattgcgacg tcgagttaaa tgttgtgtcg 300
 aattcacgtg tacgctctga atcttgactg tgtacgttca ttttcgcttg tttcacactg 360
 aaatgttata agctcaactt tactgctttt gtttt 395

<210> 5405
 <211> 441
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-021-Q1-E1-G8

<400> 5405

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gccggagtac gtagccaccg ggcacctgac ggtgatgagc gacgtgtacg gcttcggcgt 120
ggtgctgctg gagatgctgg tgggacggcg cgcgctggag ccgagccggg cggggggccg 180
cgacggcagc ctggtggact gggcgcgccc cacccttacc cggcccaaaa agttggagcg 240
gacccctggac cggcggatgg ggcaggtctg ctcggagatg ggctgcagc gcgtggcccc 300
cctcgcgtac gactgcctca gccagaaccc caaggtcccg cctccatgg ccagggtcgt 360
caccacgtc gaggcagtcc tcgccgccg tgccggtgcc gccgacgcc cgcgcgggtg 420
agacgggagg ttgatgtagg t 441

<210> 5406

<211> 366

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-H1

<400> 5406

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ccaagttttc ctacttcta ggaccctcg ccggcgacga gcaccaccag cttggttcac 120
tccaacaaa atgtcagcca atgtgggtga atcaactagc ggtgtcagca gcagcgatgc 180
agctgggggg agctttgagt gcaacatatg cttcgagctg cctcaggagc caatagtgac 240
tctctgtggc cacccttct gctggccgtg cttttaccgg tggctgcaca ttcacgcaca 300
ctcgcagag tgcccagtgt gcaaggccct cgtggaggag gacaagctcg tccccctta 360
tgggcg 366

<210> 5407

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-H10

<400> 5407

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gtcgccgtgc tagcgggtggc cgcggatgtc gccaacgccg gccacgcca gcccctgacg 120
cctggcggggc gcgtggtaca ccacaaccac ggcaagttca cggccggggc gtggaaaccc 180
gcccacgcga ctttctacgg cgggcgggac ggggtccggca ccacggcggg cgcgtgcggg 240
tacaaggaca cgcgcgcgca ggggtatggc gtgcagacgg tggccgtgag cacggtgctg 300
ttcggcgacg gcgcggcctg cggcgggtgc tacgaggtgc gctgcgtgga cagccccagc 360
gggtgcaagc ccagcgcggc ggcgtggtg gtgacggcga ccgacctgtg cccgccc 417

<210> 5408

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-H11

<400> 5408

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tatccggcca gcccaacgaa aatgtcgcgc gccacagctg cggtcctctt ctacatcctc 120
gccgtcgtg ccctcagcgc ggccgaggca ccggcagagt caccgaagge aggcagtcct 180
gccaaggcac cggccgagtc accgaaggca ggcagtcctg cagctcctgc caaggcacc 240
gagtctgctg ccacgagaac tgcccccgct aaggcacctc aagccgcctc ccccccgcc 300
gctgccgtg cccatcgtc gtcgtcgtct aggaagtctg gtccagctgc cgcgccgacc 360
accgccgcct ctacaccgtc ttcttcacg gacgaagagt tgagcccttc gccg 414

<210> 5409

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-H12

<400> 5409

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ggttgggtgc ctgagagggg agctcgcagc aaccgctgtg aatgcgccca tgggtcccagc 120
tgagatcctg tcagagctgg ctccatatgt ttctctggcc gagaagctcg ggaggctggc 180
ggtgcagctc gtggccggcg agagcggcat caaggcgctg aaggtggtgt acaccacagc 240

gcgtggcccc gacgacctgg acactcggct cctccgcgcg atggtgacca agggcctggt 300
 ggagccggtg tccagcacgt tcgtgaacct ggtgaacgcg gactacacgg ccaagcatcg 360
 cggcctccgc ctcacggagg agcgcgtggc gcacgacagc cccgcggcgg aggcgccgct 420
 ggagtcgctc 430

<210> 5410
 <211> 347
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-021-Q1-E1-H2

<400> 5410

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 actcaacaag aaaggcattg gcccccttac aaggacctta aggaaaaacg gagcgcttcc 180
 ngcngtcgcg gctagccaga cgatggccat gatcaatang ctgcangang agaaggctgc 240
 aatgcanatg gaggtctctg agtacctgan gatgatggaa cagcaagctg accacgacca 300
 cctggcgatt caagacctgc acgatttgct tacggagagg gagaaag 347

<210> 5411
 <211> 393
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-021-Q1-E1-H3

<400> 5411

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 gttctggatt gcggtctgcc ccaccacga acaatccatg gctccatctc cgcctcggcg 120
 tgctgcgctc ctctctcgca cggtgcttct gctggcggcg gccgggtcca cccccggcgc 180
 cacggctgct ggcattctcc aggtgcgccg caagttcacc gccgggggtg gaggggggtgc 240
 tggcgccaac atcagcgccc ttcgcgcca cgatggcacc cgtcacggcc gcctctctgc 300
 agccgccgac ctccctcttg gcggcctcgg gctccactg aactggcct ctattacag 360

gagatcaagc tcgggacgcc acccaagcac tac

393

<210> 5412

<211> 256

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-021-Q1-E1-H4

<400> 5412

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catagcctgc agtccaagga gcagatggaa acggtgcaga agatgaagca agaagctgct 120

acaaggcggc aaagggcctt gtcatacgca ttctctcaac agtggangaa caagaacacc 180

tcttctgcgc gagctgcgca tgggcctgct cccatgtaca tggaacctgg caaccogaac 240

tggggctggt gctggg 256

<210> 5413

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-H5

<400> 5413

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acgaccgcgt ccgtcgcttt cggtccaaa gcctccaccg tccacgagat ccagaacaag 120

tctggcatct tctcgcttga tctgtcgtgg agcgagatcg caaccttgaa gccagcatc 180

atctccccct tcgctcaggc aggcatgtta agaaatcctg cagcgaagaa tgccggcaag 240

ctgatgactt tgcccgaatt cttagacttg gccaaggcca gcaacatcac cggtatactg 300

atcgaaatag agcatgcttc ctacctgcc aagagagggga tcggcgtggt ggaggcgggtg 360

tccagcgcgc tg 372

<210> 5414

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-H6

<400> 5414

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tttcgctccc tccctccaat tgcaggatcg gcaccgatgc gattcgaccg cggcctcgca 120
tccggtgcgg aggtctgcc a ttggaggag gctcctctcc gctgcgcgcg cgcgtcgcgg 180
cctgggagag ttacctgctg gtctctcgtc cctcgggaga gattttgcga tccttggcgt 240
tactgttcga ttgcaaacag tattgctgct tctctgagga ggcattaggg ctatgggcag 300
ttgaactgaa ccgccgcagc agaaatccat ttcgaggag agagatatca aagaggagag 360
tgagtgatca tgg 373

<210> 5415

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-021-Q1-E1-H9

<400> 5415

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catccagcag gtggtgttcg cgagctacgg caaccccatg ggcattctgc gcaactacac 120
catcggcagc tgccacacgc cgcgcgccaa ggagctggtg gagaaggcct gcctcggcaa 180
gcgcattctg acgtcgcccg tgctccgccg cgtctacggc ggcgacgcc aactgccctgg 240
caccaccgcc acgtcgcccg tgcaggccaa gtgctccaag aggtcgccca gagccgcgca 300
gtaatttcgg tagtcgtcgg ctccggcctc ggcttggttac ctcccgatcat ctttcattct 360
tcattgctga tgctgctgct gtaccatggg accatgattt gaccggagac at 412

<210> 5416

<211> 438

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-022-Q1-E1-A10

<400> 5416

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accaagctca acaacagcca gctcgcgaaa ataatgaaga gccgcagcat ggcatcatcg 120
 gccgcgctct tgggtgctagc cctcgcgcta gtggcgggcca ccgccccaca ggtagcggag 180
 gcaaagaaga agagagcggc ggagagcggc gagggcgcgaggcgaagaa gatccaggac 240
 gacttctgct cgacgctgtg cgagggcaag aaggggacgg acctgggtcgt gtgcaaggag 300
 tcttgcgcgc tctcccagca gtccaacctg gtgctgtacg gcaggatcca gtgcaagggc 360
 aagtgcaccg agcagaaggc catcacggcg ccggccatga aggtctgcca ngaggagtgc 420
 gacaaggcgt acgtggtg 438

<210> 5417

<211> 380

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-A12

<400> 5417

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 tgcaacatga cggatcatggg ctacgtgccg gagctgtggg gggtcaacta caaggacgat 120
 caggtgaaca ggatcatcta cccggagcat acggtgtcgt tcgcgaagct gtcaaggatc 180
 aaaaaggacg acctcatcga gacgtccatc aacgtcatcc tcaagcagcc gcccttcac 240
 gcgacggcga accggtctgt cgcgaacgtc agggctgtga gctcggcgta gaccgtggtg 300
 gtgtacgtcc atgcgacggg gacagtggca gtgaccccg cgaagaagat gttcagagtg 360
 tccaaatagg tcgggtactc 380

<210> 5418

<211> 315

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-A2

<400> 5418

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 acgaaatttc aattcacggc cgttctttta aaaacttctt aacgggaaaa accttgcggt 120
 taccaaactt aaccctttg aagaaaagcc ccctttcaca accgggtgta aatccaaaaa 180

ggccccgtaca attgaccttt ccaaacattt gccaaccccta aagggaaagt ggaaccccc 240
 tgttatcgga gaatcattca cgccgggtttt ggtggttaacc cacaccttaa cggcaatatt 300
 tgcaacctcc caacc 315

<210> 5419

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-A4

<400> 5419

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 acgtcgatcg tgttcttcag cacgggctag ctagctccct ccctcccagc catggcgacg 120
 ccggacaaca aggggcacgg gcatccgctg cccaagtttg gggagtggga cgtgaagaat 180
 ccggccacgt ccgagggctt caccgtcata ttccagaagg cccgcgacga caagaagacc 240
 accaccggcc ctggggctgg gaacgcgcgc gcaggcattc cgccggcctt caggaacggc 300
 ggcggcgacg gcgggtacag gcccgacttc ggcgacggca accagtacac gccgccccaa 360
 cggaagaagt gggccttctg tggctgctga atcgaagctc gctgtgctgc tgtgctgact 420

<210> 5420

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-A5

<400> 5420

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 atacctatgc accacctcta gctagtctcg gtttgatttc attccatttc ttctttccat 120
 ccatccaccc aatccaatca aattagtaat gagcaaaggt gctatcatcg gcgcgtcgac 180
 cgtccttggtg gtggcggttg tcgcggccgt gtgcgtggtg tccttcaagg gcaactccgg 240
 caagggcgat ggcgacgaga acctgtccat gtcggtgaag tcggtgaagg cttctgcca 300
 gccgcggac tacaaggaga cgtgcgaggc ggagctgtcc aaggcggcgg gcaacgccag 360
 ctgcgcgtcg gacctggcca aggtcatctt caaggtcacc accgacaaga ttcac 415

<210> 5421
<211> 448
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-022-Q1-E1-A6

<400> 5421

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ccacggcgat ggaggcgaga gcggccatga gctggtactg cggtccctt ctggccgtgg 120
ccatcgcgct gttcctgtcc gtgtccctcg gcgtgcgcgc cgccggcgcc ggccggggcg 180
ttgacatcaa ggtgtcgtgt gcagcgacgc cggacccgga cgtgtgcctg cgcgcgctcc 240
aggcggacag cgactccaag accccgcggg acctggcgga ggccggcgctc cgcgcggcgga 300
cgaccgcggg cgccgcggcg ggccgactac gcgggcacga gatggacgtg gtgaaggaca 360
acgacatgtg gcagtgcctg aacgagtgcg ccggggagat cgangaggcg ctggaccacc 420
tggacgacac cganggcggc ctcgacga 448

<210> 5422
<211> 378
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-A7

<400> 5422

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acggcaacct gtcggcacc ggccacctca gcgcgtacca aaggaaactgg atcgagatcg 120
agaacgtcga gaacctgtcc atcaacggcc acggcaccat cgacgggcag ggagccctgg 180
tgtggagcaa gaaccagtgc cagcattctt acaattgcaa gatcctcccg aatagcttgg 240
tgctggattt tgtgacgaac gtccagatcc gcggcatcac gctgctcaac agcaagttct 300
tccacctcaa catcttcgag tgcaagaacg tgctgatcga caaagtgcg gtcaaggccc 360
ccggcgacag cccaaca 378

<210> 5423

<211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-A8

<400> 5423

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 agccccaaca cggacggcat ccacatcggc gactccatca acgtgacgat catcagcacc 120
 accatcggcg tctgcgatga ctgcacgcc atcggacccg ggagcacgat gatccgcac 180
 tatggcgctca agtgcggctc aggccacggc atcagcgtca gcagcctgtg gcgctacaag 240
 gacgagaacg acgtggaaga cgtacagggtg acgggggtgca cgatcacctg caccacgaac 300
 ggctcgcgca tcaagtcgta cgacgactct atgtcgtcgc tcaaggccag cgagttcctg 360
 tacgacggca tcacaatgga caatgtctcc ta 392

<210> 5424
 <211> 425
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-A9

<400> 5424

ccacgcgtcc aggcgacctc atcctgtcgg gcgccacgtc cgtgttcggc gccgcgccc 60
 tggaggtctc cgtgaagggtg gccggcatcc actggcacta cggcagccgg tcccacgccc 120
 cggagctcac cgcggtctac tacaacacgc gccgccacga cgggtacctc accatcgcgc 180
 gcctcctggc gcgccacggc gccgtgtcga acttcacctg cgtggagatg cgggaccacg 240
 agcagccgca ggaggcgcgg tgcattgccg aggcgttgtt ccggcagggtg ggcgccgcgg 300
 cgcgcgcccgc cggggtgggc ctgcggggcg agaacgcgct gccgcggtac gacggcacgg 360
 cgcacgacca ggtggtcacc acggccgccc agcgcgcccgc cgatgaacgg gatgggtggcc 420
 ttcac 425

<210> 5425
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B1

<400> 5425

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cgcgccggcc gccgcaccac cgggtagccc cggccccgcg cgcgcgccgc cccagctcgt 120
ctgctgtcgc tcctccgtga tggccgacgt cgacgtggac gccacaacg aggccgagcg 180
aaggacgcgc tcggagccgg ggacctccat gtcgccgtca tcggaggccg acgacgacac 240
ggccagcagt acaccaacg agtccccggc gcgcgccttc gcggggcaca cgctcgagga 300
gccgcctcgg cggcggggcg cgtccccggc gtcccgctcc gttcggatgc tccagagcgt 360
gtgccggtcg ctcccgtgc tgaaccgcg gtgcggggcg ccgatgatgc aggccggggg 420
cgtgcggatc gcgccg 436

<210> 5426

<211> 248

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B10

<400> 5426

caaaaggatc aaaacttaat tccccttaaa ggcaaagtca aacccttca aaagggtcac 60
caaaattcaa ttcacgggcg ttcttttaaa aacgtccgaa ctgaaaaaac cgggggttaa 120
ccaaattaaa ccccatcaa aaaaacccc ttttctcaag ctggcgtaaa aaaaaaagg 180
ccgcaccaa ttacagtcc aaaaatttgc ccaccaa atgaaaaatgg gcaccacctt 240
atcagggc 248

<210> 5427

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B12

<400> 5427

cccgggccga cacacgcgtc tacagtggct ctcgtagtt cgcaaggcg ccccttctg 60
ccctcacatc cgctcctccc tccccgacac cgaccgaccc ctcgtcgct cgctccctc 120

cccgatcccc accgccatgg ccgcccgcgc cgcgcgcgcg tcctcctctt cctcctccga 180
 ggttccgatc gccgcccgca cctgcgctctc cgtcggcgat gtggcggtgg gcgcggtggc 240
 tacaggcagc ggcgaccggg tggcggcgga ttgcgggggtg tgcgccatct gcctcgacag 300
 gatagcgctc caggagacgg ccctcgtcaa aggttgcgac cagcctact gtgtgacctg 360
 tattttgagg tgggcatcct acaaggagaa ccctctctgc ccacagtga agcatcc 417

<210> 5428

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B2

<400> 5428

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 ccgcttcttc tctggctcaa tggagggcct ggctgctctt catttggaat cggagcattc 120
 catgagatag gtccgttccg tgtggacacg gatggcaaga cactctgcaa ttttaaatac 180
 gcctggaaca cagtggcgaa cgtgctgtac ctggagagcc ccgtgggcgt gggcttctcg 240
 tacgccgcca acacgggcgt gtacaagggtg atgggcgaca acatgaccgc ggacgactcg 300
 ctccagttcc tgetcaagtg gctggaccgc ttcccggagt acaagggcgc cgacttcttc 360
 atcgccggcg agagctacgc cggccactac gtcccggagc tcggccgctc catect 416

<210> 5429

<211> 129

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B3

<400> 5429

ccgggtcgac ccacgcgtcc aggtaggcgt ggctcagttt atgtgatact gctagcgatg 60
 gatgatgatg atctgcgtgt aattgaatta aagaattgtg ctgatctttc tacaacactg 120
 ttccacatc 129

<210> 5430

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B4

<400> 5430

cgggtcgacc cacgcgtccg cccacgcgtc cggccacgtg cacgccgagg aatcgctgcc 60

cgttgtggcc aaaagcggcg cggcgggtggc aaggaacgac ggcgactcgc ggctgctcgt 120

cgacctggag cccgtgccgg cgatcagatt cagcaagcgg cacggcgact acggcgccgg 180

cgaccacgcg ccgccgtacg ccaagacctt gtccagcagc ttcaaggagc cggcccgtgt 240

cgcggaccgc cgccctctct ccggccccgg gcagctcgcc gcgtccaccg gtttcgcctg 300

ggccaagaag ccccggtccg tcgccaggtc ttcgacggcg gcagccgccg tcacgaagcg 360

gagctactcc aagggttcag ggaccatgaa caacagcag 399

<210> 5431

<211> 344

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B5

<400> 5431

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ccagcagaaa atacataata tgcattgtact cctctttttt tccgtatagt aatataaaca 120

aattttcaca tgtgttttaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

ggaaaaaaaa aaaaaagaaa gaaaaaaaaa aaaagaaaaa aaaaggacgg cggacccaaa 240

ggatcaaggc gtacgaaagc gtggaagcag catcacatgt actgaaaagt ggaacggaaa 300

attaattcac aggccgccgg taaagaactt cgtgcaggga aaag 344

<210> 5432

<211> 392

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B6

<400> 5432

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ggacgacgcg acggacgcgg cccggagcgc gtcggacatc gtgctgacgg agcccgggct 120
 gagcgtgata gtgagcgccg tgctcaccag ccgcgccatc ttccagcgca tgaagaacta 180
 caccatctac gccgtgtcca tcaccatccg catcgtgctg ggcttcctgc tcgtcgcgct 240
 ggtctggaag ttcgacttcg cgccttcat ggtgctcatc attgccatcc tcaacgacgg 300
 caccatcatg accatctcca aggaccgct gaagccgctg ccgacgcccg actcgtggaa 360
 gctcaaggag atcttcggca cgggcatcgt gc 392

<210> 5433
 <211> 413
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B7

<400> 5433
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 tctgtggctc gtgatatccg cgcaacaat gctagttgcc gccgcggccg gcgccaagcg 120
 gcaggcgccg gtgatgttcg tgttcggcga ctgcacgctg gacgtcggga acaacaactt 180
 cctgtcgggg gcggccgtcc ccagggccaa caagccccac tacggcgctc acttccccgg 240
 cggccatccc accggaaggt tcagcaatgg cgacaacacg gctgacttcg tcgcgaagag 300
 catgggggtt aagagtagcc ctccgccgta tctgtcgtt gcaccaacg gctccagccc 360
 tctgctcgcg cagactgctc tcaccactgg tgtcagctac gtttcgcgag acg 413

<210> 5434
 <211> 411
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-B8

<400> 5434
 tacaagactc tacagtgagt cgtattatgg ccatggaggg tcgtcgtcgt cgtcgtctcg 60
 ttctgtggct cgtgatatcc gcgcaacaa tgctagttgc ccgcgcggcc gcgccaagc 120
 ggcaggcgcc ggtgatgttc gtgttcggcg actgcacgct ggacgtcggg aacaacaact 180
 tcctgtcggg ggccggcgtc ccagggccaa acaagcccca ctacggcgct gacttccccg 240

gcggccatcc caccggaagg ttcagcaatg gcgacaacac ggctgacttc gtcgcgaaga 300
gcattggggtt gaagagtaac cctccgccgt atctgtcgct tgcaccaac ggctccagcc 360
ctctgtcac gcagactgct ctcaacactg gtgtcagcta cgcttccgca g 411

<210> 5435
<211> 396
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-C10

<400> 5435

cctatagtga gtcgtattat ctggacaacg ggttcaagtt cgacgccacc accgcgcggg 60
ggcgtgacgt ccacaggctc cagggatgtc taggcgagcc acgcagtcgc gacgggctcc 120
acgtgggcac tgaactgcac aggtcacgtc ggtatatcgg tgctgtgccc cgagaagccg 180
ccgcgaccgt ctggagtga ggcacagtgg tgggcatggc ccgtgggtgt ccgcgccggt 240
gggggtgctgg gaaccagcgc cttgacgctc tctgtaggcg gcgcggtgag ctggaccagg 300
atacgggcaa tggatgagat ggatcagcgg gccatgggcg gggaggagcc ggggaggatg 360
acggtgcgct ggagcaggat gccatcggcg accgtg 396

<210> 5436
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-C11

<400> 5436

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aatggcttct cgttcgcca ccattgcctt ggtcctcctt cttgcctgct tctcctcgcc 120
ggcggcggcc ttcaacatca ccaggctact cggacaattc tccgacttca caacctttaa 180
caacctcctg tctcagacga agctcgcgga ggatatcaac cgccggcaga ccatcacctg 240
gctcgcctg gacaacggcg ccgcggtgg catctcctcc ctcccatcag acgtccagcg 300
gaagggtgctc tccatgcacg ttgtcctcga ctactacgac accgccaagc tggaggccat 360
caagaaccac tccgcctgct tgacgactat gttccagtc tccggccagg ccaccgaccg 420

catgggcttc ctcaact

437

<210> 5437

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-C12

<400> 5437

ccacgcgtct aagcgcacgg accgtgggcg acaccgtgca ggacgcgtgc agcaagaccc 60

agttcccca gatctgctg gacagcctcg ccgccaagcc ggagagccag aatgcgacgc 120

cgcgcaagct ggcgagctg ttcgtgaaca tcgcggccga gaaggggtcc gggatggcca 180

ccttcgtgca ccgcaagtac agcgacaagg aggacagcga catgttcagg tgctacgaca 240

gctgctccga cgacgtggag gaggccgtcg cccacctcaa cggcctcgtc cgggagccca 300

ccgacgcca gttcctcgag ctcaagtcgt ggctctctc cacgctcggc ggcacctcca 360

cctgcgatga cgctgcaag gacctgcca agaccagcga caatgacgac gtcgtc 416

<210> 5438

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-C2

<400> 5438

ggtctagaat acccggtcg acccacgct cgggcccgac gcgcggtggg agaaagacga 60

catgcccgtg ggccgcgtca tgggcgacat gctgacctc cccaccggcg acctgctgct 120

gctgagcggc gccgccaagg gctgctccgg ctggggcttc gggcggcagc cggtgctgac 180

cccggctctg tactcgccgc tgaagggtgca tggcccgtg ttcttggcgc tggcgtcgtc 240

gaccatcgcg cgcatgtacc actccaccag cgccgtgctg ccctacgcca cggtgctggg 300

ggccggcggc atcacgaac cgcgctacaa cttcatcggc gtggacttcc ccaccgaggt 360

gcgcgtggag cggttctccc cgccgtacct cagcgatggg gccgccggca accgcccgtg 420

gctgga 426

<210> 5439

<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-022-Q1-E1-C5

<400> 5439

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ctggaggggt cccacacct gcagaacacg tacgactcgc tcgacgtcca cgtcggccac 120
tgctctccg tgctcgtcga cgccgaccag aagccccggc actactacat ggtggcctcc 180
acgcggttca tccacgacgc caagtccgcg tccgccgtca tccgctacgc cggctccagc 240
gccccgccgg cgccgaacat gaccgagcca cgggccggct gggcctggtc catcaaccag 300
gccaggtcgt tccgctggaa cctgacggcc agcgccgcgc ggccaaccc gcagggctcc 360
taccactacg gccagatcaa catc 384

<210> 5440
<211> 374
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-C5

<400> 5440

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gaccccaacca tcgccgcgtt caacgacatc atgacgcccg gcaagttcga caacatgtac 120
ttcgtcaacc tcgagcgcg cctcggcctg ctcagcaccg acgaggagct gtggacggac 180
ccacgcacca agccccctgt gcagctctat gcatccaacg ccacagcctt cttcgacgac 240
ttcggccgcg ccatggagaa gctcagcttg ttcggcgta agaccggcgc cgacggcgag 300
gtcatgcggc gctgcgacgc ctacaacagc ggccccgccg tcgccgccac cataccaag 360
atgtgacgac gctg 374

<210> 5441
<211> 373
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-C6

<400> 5441

tctagaactc ccgggtcgac ccacgcgtcc ggcttccccg accacacgca ccgaggcttc 60
gagaccgtca cctacatgct tgagggcgcc gtgacgcacg aggacttcga gggccaccgt 120
ggcaccatca aggccggcga cgtgcagtgg atgacggccg gccgcggcat cgtgcactcc 180
gagatgcccg ccggccccgg cacgtccagg ggcttcgagc tctgggtcaa cctctcctcc 240
gccaacaaaa tggtcgagcc cgggtaccag gagatccaga gcaaggacat cgcgtgcacg 300
tccgacggcg acggggcggt cacggtgcgc gtgatcgccg gccacgccat gggcgtgcgc 360
tcgccggtgc gca 373

<210> 5442

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-C7

<400> 5442

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cctacatgct tgagggcgcc gtgacgcacg aggacttcga gggccaccgt ggcaccatca 120
aggccggcga cgtgcagtgg atgacggccg gccgcggcat cgtgcactcc gagatgcccg 180
ccggccccgg cacgtccagg ggcttcgagc tctgggtcaa cctctcctcc gccaacacaa 240
tggtcgagcc cgggtaccag cagatccaga gcacggacat cgcgtgcacg tccgacggcg 300
acggcgggcg cacggtgcgc gtcacaccg gccacgccat gggcgtgcgc tcgccggtgc 360
gcacgcgcac gc 372

<210> 5443

<211> 343

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-C8

<400> 5443

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agtgggcccc gtacctcgc agctcctcg cggccggcct cgaccccatc gtcccgacc 120

tcctcttctt cggcgcctcc tcgtccacgg tccccgaccg ctccgacacc ttccaggcca 180
ggaccgtgaa ggccgccatg gacggcatgg gcggtgcgccg cttcgccgtg gtcggcggtca 240
gctacggcgg cttcgtcgcg taccggttgg cggccatgta cccggaggcc gtggagcggg 300
tggtcctcgt gtcgtcgggc gtgtgcctgg aggaggggga cct 343

<210> 5444

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-C9

<400> 5444

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acttcaccaa ccacaacgac gtcctgctct tcggcgccag cgactcctgg ccgcaggacc 120
agatcatgca gatcaccgtc gccttcaacc acttcggcag gggcctggtg cagcggatgc 180
caaggtgccc ctggggcttc ttccacgttg tcaacaacga ctacacgcac tggtctcatgt 240
acgccattgg cggcgccgac gcgccaaacca tcctcagcca gggcaaccgc tacatagcac 300
cagcaaacat cgccgccaaa gtgatcacca agcactacgc ggaagaaggc gtgtggaaga 360
actgggtgtg gcacacggat gacgacctgt tcctgt 395

<210> 5445

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D1

<400> 5445

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gatcaacaag gaagaattcc agctagcact atttaagaat cagaggaaag aaaatctttt 120
cgccaatcgg atatttgacc ttttcgatgt caagaaaagg ggtgtcattg attttggtga 180
ctttgtccga gctctaaatg tgtttcatcc aaatatccca atggaagaaa aagtcgattt 240
ctcgttcaag ctatacgata tggatggcac agggtttatt gaacgaaagg aggttaagca 300
catgttaatt gctctcctag gagaatcaga aatgaggcta tctgatgaga tcattgagaa 360

aatccttgat aagacatttt ca

382

<210> 5446

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D10

<400> 5446

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agtgaaggcg gcggccgtgg ccgcgctgct gctggtcgca gcggtgtcgc ctgccgcgcg 120

cgcggcggcg gtggcgggtg cgggaggggc gccgtcggcg ccggcgggtc cgctggacat 180

cgcgcagctg ggcgccaagg gcgacggcaa gtcggacagc accccgatga tcctcaaggc 240

gtggaagaac gcgtgcgagg cgacgggggt acagaagatc gtcattccgc cgggcaacta 300

cctgacgggc gggctggagc tgaaggggcc ctgcaagtcc tccatcatca tccgtctcga 360

<210> 5447

<211> 214

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D11

<400> 5447

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atcgtagggg agataatgcc ggatggcttt gtaaagtttg ggaggacatg catcataatt 180

gaagtcaagt gataggatcc tgttttttaa gtac 214

<210> 5448

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D12

<400> 5448

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cagcaggggtg ttacgttcc gtgaactggt ggacgccacc aactccttct gccagaaaa 120
cctgctgggc gagggcggt tctggagggt gtacaaggga tgcattccag acaccatgga 180
agtcatagcg gttaagcagc tcgacaaaga tgggctgcaa ggtaaccgtg agttcctcgt 240
cgagggtgctg atgcttagcc tgctgcacca tccaaacctt gtcaccttgg tctgggtacag 300
cacagactgt gaccagagga tcctagtgtg cgagtacatg tcactcggtt cactgcaaga 360
ccatctcttc gatctcagtc cgaaatccca gccactttcc tggcacacac cgatga 416

<210> 5449

<211> 118

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D2

<400> 5449

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atcagcaaca acataaataa aggtcggccg ctctagagga tccaatctta ggtcagca 118

<210> 5450

<211> 349

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-028-Q1-E1-D3

<400> 5450

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tctccatcgg ccccggaagc aagaccatcc gcgtgaaggc cgtcaagtgc ggcccgggcc 120
acggcatcag cgtcggcagc ctgnngcggt acaaggacga gaaggacgtg gaggacgtga 180
aggtgacggg gtgcacgctc gccggcacca ccaacggcct gcgcatcaag tcgtacgagg 240
actccaagtc gtcgtcaag gccaccaagt tcctgtacca ggacgtcacc atggacaacg 300
tctcctaccc catcatcata gaccagaagt actgccccaa caacatctg 349

<210> 5451

<211> 333

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D4

<400> 5451

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ctttcctctt tcaccgaaga ttccggtgcc ttatgtcaca ggacgacatg aatcacatgg 180
gtcttgattc ttgtatgaac tcaggattta tagtggatct tggatctggt cgatgcaaga 240
cctggtctag ccactaaatg atgaactctt ctgctgatat aatatcattt ctagaagaat 300
tcctttgctg gacagtatat tacttatgtg cag 333

<210> 5452

<211> 321

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D5

<400> 5452

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cccggccgtc ctccaaagtc acaagatcct caccgtgatg cacatctaca tggtagatcg 120
ccacgggttc agttcatggc atcaacagge gctaaatgaa agcgacaggg tcatcgagat 180
ccgtacgac ctattcctct ccgtctacgt tgcgctacag ctcgacttca tcaatcacag 240
ccataatact gtcaccttag aatgggtacct cgatcatctta cgtcattcgc ataagcattc 300
accaacata atgttcgaag a 321

<210> 5453

<211> 369

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D6

<400> 5453

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acgcacacgt ccagcacccg gcccgggcgc ttcgtgccca acgccagcgt cttcggaac 120
gggctcggca cggcgggccg catggccccg cgcgcgcaca tcgcgttcta ccaggtgtgc 180

tacgaggaca agggctgcga ccgggacgac atactggcag cgggtggacga cgccatcggg 240
gacggcgctcg acatcctgtc gctgtcgctt ggccacgagg atgccatcga cttctcggac 300
gaccccgctct cgctcgccgg gtacacggcg atcctcaacg gcgtgttcat ctgcgccgcg 360
gcgggcaac 369

<210> 5454
<211> 368
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D7

<400> 5454

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gtcgggtcgt cggggacagc tgatttcaca cgacgagccg gcgagccggc cggcatttcg 120
tcgtcggatg gcgccggcct cctcctcgtc cgccggcgtc gcgtgcctcg tcctgtcctt 180
gtcctgtctc ctgcgccggc cctccgcggc gcacggctcg ttccaggcta ggctgtctct 240
gtcagatgac catgggagcg gtatagtggc gcgatggcgg aggttgctcg ccgacgtgc 300
gactccagcg aacaactctc ttgtgctggc tgcggcgagg actcaccgga gcgacccctt 360
cgccaaac 368

<210> 5455
<211> 338
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D8

<400> 5455

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ttgctaataa gcctgcgtgc ccttcgttct tcctcgtctc gatcccgacg acgctccggt 120
cggctccggc aaaccacatc aagtcgcgat ggagatgaag aaggtcgcct gcgccgtcct 180
cgccgccgcc gcctccgcca ccgtggctct cgccgccgag gccccggcgc ccgccccac 240
cagcgctctc tcggccgcgt tcccggccgt cggcgccgtg ctggggcgct ccgtgtctct 300
cttcttcgcc tactacctgc agtaaaatta aaggagga 338

<210> 5456
 <211> 383
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-D9

<400> 5456

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attaggtgca gccatgggtg cctgtgcaac gaagcctaag acgcttgagg ggaaagcccc 120
agctgaggcc accatctcca cacccaaggt tgcacctgag accactacca tccacattga 180
ggttgcgcca aaacatgcag tagttgagaa ggtggaggag gacaaggagg aggcactaac 240
agtggcgccg aaacaagagc cagcagccac cattgagcct cagcagattg ctagtgagggt 300
gaccacttcg gaagtggcgg tcgtcgttgt cgagcctgag aacaaagagg aggaggaagt 360
tgtggagaag accgtcatcg aga 383
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<210> 5457
 <211> 333
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-E1

<400> 5457

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ctagaaggtc gagaggagaa gaaggcgaga cgtgcagtcc gtcggggtcc gatcgagaac 120
agggaaagcaa gaggttgcta gagatcgagc tcatcaacca atcaagtcgt acgtcgtcag 180
catcacgcga ccgatggcg cgcgccgct ccagctatgt atccaggagg gggctctccg 240
cagcgatgac ggtggcggag gactccgtga agaattgtga cgacaacgct gtgaagctgg 300
gaactgtggc caaggacatc gccagcgcca tgg 333
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<210> 5458
 <211> 387
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-E10

<400> 5458

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acgatcccaa agctccgtgc tgcagacggc caggcggacg acgcagtcac tgctgcaccg 120
gctcgcgaga agcacacagt catggcgaca gagcttctcg gcggtcgccg cagccgcgca 180
tcaggatgcy gggcggctgc tgctgcaggt gcagtgatta gcgtttaacg gagagtcct 240
gcatgaagtt aaccacaagt ccacacggta tacacgacgg aacaagtgtt tccatcagac 300
gatcatcact gaagaatcaa ccatctcatc actgtatgtg tgccgtgttc ttgtcatttc 360
atcgttccaa tgcaacagaa acgggtt 387

<210> 5459

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-E11

<400> 5459

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gtgcagtcac ctctccatc accaccacca agtcaacaa cagccagctc gcgaaaataa 120
tgaagagccg cagcatggca tcatcgcccg cgctcttggt gctagccctc gcgctagtgg 180
cggccaccgc cccacaggtg gcggaggcaa agaagaagag agcggcggag agcggcgagg 240
cggcggaggc gaagaagatc caggacgact tctgctcgac gctgtgagag ggcaagaagg 300
ggacggacct ggtcgtgtgc aaggagtcct gcgcgtctc ccagcagtc aacctggtgc 360
tgtacggcag gatccagtgc aagggaat gcaccgagca ga 402

<210> 5460

<211> 323

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-E12

<400> 5460

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gttgtgtact gccaacagcg cctccaacgt caccgtcaag ggtgtcagca tcacgaccat 120

caccggcacc tccgcgacac cggaggccct tagcctgctc agcactgcca aggtcccatg 180
caccggcatc acgatggctg acgtcaacgt cgagtagagc gggaccaaca acatgaccaa 240
ggatatatgc acgaacgcca acggcagcac caagggttgc ctcaaggagc ttgcatgcgt 300
ctagaccctc catcgactga acc 323

<210> 5461
<211> 459
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-028-Q1-E1-E2

<400> 5461

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ctatcggcga tcctcgctcg ggcggtggtc gtcggtgtgg tcgccaccgt caccgctcc 120
ggcaagaagg ccggcgacaa cttcacggtc cggggggagg cttcccttgc cacgtccggc 180
aagtcggtca agtcctctgt cgcgcccacc ctatacaagg agtcgtgcga gaagacactg 240
tcccaggcca ccaatggcac cgagaacccc aaggaggtgt tccacagcgt ggccaagggtg 300
gcgctggagt cggtccagac ggcggtcgag cagtccaagt cgatcggcga ggccaaggcc 360
agcgactcca tgaccganag cgcgcgcgag gactgcaaaa agctccctgg agacaccgcc 420
caaaaactga aggggcatac caaaaaatgc cgggggggaa 459

<210> 5462
<211> 396
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-028-Q1-E1-E3

<400> 5462

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ggtagtcttc gccgccactg ctggcgcttc ttcgtgctat ttctgtcga agatgattgg 120
gaagccactg gtgttcacgc tgtggccaga taaactcagc ttcttccaga gacaggttgc 180
tataagaaga gagaagctct tgaattacat gcttttcctc atggtgaccc caacattgcc 240

aaataccttc atcaacttgg cttcacgat agtagatgtc ccctaccata tattcttact 300
 gggaactctc attggcetta tcccagcttc ttatgtgact gtcagggctg gaatcgctct 360
 tggagaatta acttcgctaa ggcaccttta cgacac 396

<210> 5463
 <211> 387
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-E5

<400> 5463

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 aaggcgcgga agaaaaagaa gacgaagaat gagcagaacg ggctggcagc cctagtggag 120
 gagatctcgc tctcgaacag tcccaagcac agggcagcag caggggagat actgcggatc 180
 ggcaaccaca acataccag caggggtgtt acgttccgtg aactgggtga cgccaccaac 240
 tctttctgcc cagaaaacct gctgggcgag ggcggcttcg ggaggggtga caagggatgc 300
 attccagaca ccatggaagt catagcgggt aagcagctcg acaaagatgg gctgcaaggt 360
 aaccgtgagt tctcgtcga ggtgctg 387

<210> 5464
 <211> 407
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-E6

<400> 5464

cccgggtcga cccacgcgtc cggggctagc tagctagaca aggtccattg agctagcccc 60
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 gaaccctgta acaagaattg ccagcagcat ctggacaatc ttgttaacag agttccaaag 180
 gttcaattcc aagcagatac aatttccgag ttggatcgag aagagtgcgt gcatccgatc 240
 cgtccgtcca cgttcgtggt tcgtataagc taggtttcat caaccatggg cacaagatg 300
 aagaagggca tctgaagcc gttccgctat atctcgaaca tgatggacgg taaggagcct 360
 gaaatgcaaa ttgggctccc cacgatgta aaacatgtgg cacacat 407

<210> 5465
 <211> 366
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-028-Q1-E1-E7

 <400> 5465

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 cgggacacgc tgcgcggtct ggacggcgcg ccgccggggc cgctgcggaa ctggggcacg 120
 ccgggtccgt gccggggcaa ctctctctcc tggtaaggcg tgctcgtgcc cggcaacggc 180
 tccgtgcagg gcctgcagct ggagcggctc ggctgtcgg gtggcgcgcc cgacctgtcc 240
 gtctcgcgg tgctcccggg cctgcgcgcg ctacgcctct ccgacaacgc gctcaccggc 300
 gccttcccca acgtgtccgc gctcgccgtg ctcaagatgc tctacctgtc gcggaaccgc 360
 ctgtcc 366

<210> 5466
 <211> 367
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-028-Q1-E1-E8

 <400> 5466

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 atgcagctca cgagctccac caaatgctga cctcccaaag ctgtggtcgc gatccaaaca 120
 gaagggaaat gatcaggcga caaccggcga tggatcggtt cctgcagctg ctggccgccc 180
 gcgtggccgt gctactgcta gtggcaccgc gggccatggc tgacgacgac attgtagaag 240
 tcggcgtaaa ctggggatcg cagctctcgc acccgcttct ccccggtcc gtggtgaaga 300
 tgctcaaggc gaaccgcac gccagggtca agatgttcga cgccgactcc tggcccgtcg 360
 gagcgct 367

<210> 5467
 <211> 394
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-E9

<400> 5467

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agatcgcaaa aatccttgct gcatacggcc aggcggccga cgcggtcgct gcggccccgc 120
ctcccgagaa gctcaaagtc atggagaaga ccttctcggc ggtcgccgcc gccgtcatc 180
aggaggcggc ggcggtgctg gctgctgctg cagtgattaa ggtttaaggg agagctcctg 240
catgaaatta accacacgtc cacacgtata cactacggaa caagtgtttc catcagacga 300
ccatcagtga aaaaaaacca tccttctctg tgtgtgtgcc gtgtttttgt catttcttct 360
ttccattggc aaagaaaccg ggtaaccttt tttt 394

<210> 5468

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-F10

<400> 5468

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agcggaggca aagaagaaga gagcggcgga gagcggcaat gacaacggcg gcggtgatgg 120
tagggcaagt attccaggca atgcggagcc agccgaagcc gaagagaacg gcagccggtt 180
gccgccatcc ttgcagtggc tcaacagcct gttctcgcca tcggcgcagt cctccggtag 240
cggcagcggc agttcgcac attgggagaa ttgagcaata atgcaatata aggatggatg 300
attgttgctg cttgagccca ttggtgccaa tgtacatagg aagagcagga gcatgccggc 360
atgaaaattt ggagcccttt tt 382

<210> 5469

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-F12

<400> 5469

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gatcaactgcc ttgggtccca gcagcatgaa gatcaagggtg gtcgctctc cagagaggaa 180
gtacagtgtc tggatcggag gatccatcct ggcatccctc agcaccttcc agcagatgtg 240
gatcgccaag gccgagtacg acgagtcggtg cccatccatc gtccacagga aatgcttcta 300
attctttggg cccgagaaat gcaagccgtg ggggagccgt taccgcccgc agcctctcct 360
gcccccggtt tcgttgccgt ttcttcatta gcggaacaa agttttgtg 409

<210> 5470

<211> 374

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-F2

<400> 5470

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cacggtgggc gaccctgggt gttcaccggt gcaactgcga tctaggcggg tcttcctggg 180
gctcgatctg ggtctcatgg ttggctaatt tctcaccgga gcatttgggg gacgggcccgt 240
gcgcctccaa tttctcgccg tcgacgtgtt ctccgcccgc ggactacagc gtgccatggg 300
cgggactcct gggagcttaa tccgcgcgcg aggtcacgag tcacctgaag atcatcctgg 360
tacctggaat ctca 374

<210> 5471

<211> 376

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-F3

<400> 5471

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cccagcgcgg cgacactggt ggtgacggcg accgacctgt gcccgcccaa cgaccagcag 180
tccgcggaca gcggcgggtg gtgcaaccgc ccgcgggagc acttcgacct cagcatgccc 240

gcgttcctcc agatcgacaca ggagaaggcc ggcatcgtgc ccctctccta ccgcaggggtg 300
gcgtgcacga agcaggggtgg catccgggtac accatcacccg ggaacaagta cttcaacatg 360
gtgacgatca ccaacg 376

<210> 5472
<211> 375
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-F5

<400> 5472

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ggacaagtgc acggcgtgcg acaagaccgt ccacttcata gacctcctca cggccgacgg 120
cgccatctac cataagacat gcttcaagtg cagccactgc aaaggggtcc tctcgatgtg 180
cagctactcc tccatggacg gtgtgctgta ctgcaagacc cacttcgagc agctcttcaa 240
ggagaccggg agcttctcca agaacttcac gccaggtggc aagtcacag acaaggggtga 300
actgacaagg gcccgaagca agctgtcgtc tgcattttct ggtaccacag ataagtgcgc 360
agcatgccag aaaac 375

<210> 5473
<211> 367
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-F6

<400> 5473

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catgtcggcc tactgcggaa agtacaagga tgagctcatc aagaatgctg cctacattgg 120
cacccttggc aagggatatc ttgctgctga tgagtcact ggcaccattg gcaagcgctt 180
ttccagcatc aatgtcgaga acgttgagga gaaccgccgt gccctccgtg agctcctatt 240
ctgctgccct ggtgctctcc agtacatcag cgggtgtgat ctcttcgagg agaccctgta 300
ccagaagacc aaggatggca agccttttgt tgatgtcctc aaggaggag gcacccctcc 360
tggcatc 367

<210> 5474
 <211> 368
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-028-Q1-E1-F7

 <400> 5474

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 agctcgccgc cgttggtccc gccggcccag ccgccaccgc acacgcccgc gtccctcgatg 120
 cagctctgga tccgacgcca cgtctcatag tccccgacca tgtcctgcag ccagtcggag 180
 tagtccgcga tccggtactc cccgtaccgc gccccggaca cggcggaggc ggcgccccgg 240
 ttggtgacgg cgaacgcgaa ggcggtggcc acgaacatgc cgatgaggat cacgaagatg 300
 gcgacgacgt acgccagag gagcggcggtg gcgcggcagc aagcgccggc cagagccagg 360
 agcgacag 368

<210> 5475
 <211> 394
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-028-Q1-E1-F8

 <400> 5475

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 gccccgcctg acatgcagtg caaggataag ttcctagtcc aaagcgtcgt tgccccctgct 180
 ggtataactg tgaaggatgt cactggggat atgtttacga aggagtctgg gtataagatg 240
 gaagaggtca aattgcgagt gacctatgtt gtcctccac agccaccctc tccagttcca 300
 gaggaatctg aagaaggttc tccacctang gtttctgaat cagaaaacgg agatggacct 360
 tctggaggat tcaccagagc actaagagaa cgca 394

<210> 5476
 <211> 387
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-F9

<400> 5476

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acggccaccg cgtacggctg ctacgacgac tgctacgagc ggtgcgccaa cggcaagaat 120
gacgaccccg cctgcaccaa gatgtgcaac caggcgtgcg gcagcaccga caagggcgcc 180
gccgcccggc cgccggcttg atcgacccgg gctttatcgg cgcgcgggct cagctcgata 240
tcacatata caatcgtttg ctagctccgt cgttcacgtc agcccatgca tgatctctcg 300
acccggccca ttgaatcttc tccctctact acattatcgc tttgttgcat gtcacgttcc 360
tcatacatcg atccactcat cctttttt 387

<210> 5477

<211> 383

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-028-Q1-E1-G1

<400> 5477

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acggcgtcgc gcaggccacc gggtcgctgg tgcacgaggc cgccgctcgc ctgaggagct 120
gaccggcccg gacgggacgg gacggaacgg aagcctacga tcgactgtac atacaggggt 180
tgggacttgg gagggagctc gggttcttgt tgggttttcc tttgggtgga gagcgaggga 240
gcgcagtcga gagccagcga gcagtctctc gtgcagtgca gtgcagtgca gtgcagtgca 300
gctccggcgt agatgagatt gtattgtgac caagccggga gggaaagcan ggagggaag 360
acaaagatgt tttgtcacgt ttc 383

<210> 5478

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-G10

<400> 5478

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 gtcgacggag gccaatcttc caacttcttc cctccgtcga tcatccagca ccagcaggag 120
 aatcccgtcg aatccccctc tcaaccaagg gcgcgcgcgc gtgcgtatgc ctctccaga 180
 tccaaagcaa cagacagcga gggggcaccg ggggtccgccc catgtttgcg atttatggag 240
 gatcatgctt tcttgcttac tacattagct cctgacgcgc cgcctcccc tcgcttcat 300
 tgatttctgt tataattact accgagctac tatctccaca ttattattgg taaagaaaga 360
 aagggcgccct cctctaattt gatgggcatt ccggt 395

<210> 5479
 <211> 407
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-G11

<400> 5479

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 agcgtcccga aggggaagct ctgataacat caccgttgtc atcgtccgct tcctatatgg 180
 aactaccggt gataaatcag gcgcagacaa agagaccacc aatgaccaa actcctaatt 240
 acctcctgta gggatccctc atgcgtgtgt tttcttctgg ctgttgatc tgatgctcaa 300
 agtagatgct ccgtgtgtct tccgtgctg ttccgcaagg aaactgactc ccccgaccgt 360
 cgtcgtgatg ctgcccgtc atgctcctag acgggaatga ctgccgc 407

<210> 5480
 <211> 379
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-G12

<400> 5480

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 cctgctcttc ttctctggcc gtctcgccgc ggcggagaag actttccgcg gagggggagg 120
 cggaggctac ggcgggttgg aggcgggtgg cggaggcggc ggcgggggct actccacccc 180

gagcgaggca gcgccatcca cgctgccgc tggggagacg acgacccctt cgtcaggcgg 240
 cggttactcc acccctagcg aggcagcgcc atccacgcct gccgctgagg agacgacgac 300
 gactccttcg tcaggcggcg ggggttacgg cggtgcaacc ggcaaggctt cctcaagcgg 360
 cggcgggctg gaccccgac 379

<210> 5481
 <211> 383
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-G2

<400> 5481

gggtcgacgc acgcgtccag gctgaggcgc accacgttca gggagacctc gcggcgttct 60
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 tccgcaactg cgtcatctcc ggcaccattg acttcatctt cggcaactcg gcggcgggtgt 180
 tccagaactg cctcatcgtc acgcggcggc ccatggacaa ccagcagaac tcggtgaccg 240
 cgcacggccg cacggacccc aacatgaagt cggggctcgt catccagaac tgccgcctgg 300
 tgcccgacca gaagctcttc cccgaccgct tcaagatccc ctcgtaacctg ggccgaccct 360
 ggaaggagtt ttgcgcctc gtc 383

<210> 5482
 <211> 399
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-028-Q1-E1-G3

<400> 5482

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 gcttcgcgcc gctgacgtca acgggggtccc agcagtaccg cgccctgacc gtcccggagc 180
 tgaccagca gatgtgggac gcgaagaaca tgatgtgcgc ggccgaccgg cggcacgggc 240
 gctacctgac ggcgtcggcc atgttccgcg ggaagatgag caccaaggag gtggacgagc 300

agatgctgaa cgtgcagaac aagaactcgt cctacttcgt ggagtggatt ccgaacaacg 360
tgaagtcgag cgtgtgcgac atccccccca cgggcctgg 399

<210> 5483
<211> 384
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-028-Q1-E1-G4

<400> 5483

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cctccatccc atcccgcgcg cgcgtctct acggtcgcta ataagccgcc gcatccaggg 120
atggagatga agaagatcgc ctgcgccgtc ctgcgcgcg cctcggccac cgtggcgctg 180
gccgcggagg cgcgggtcc gtctcccacc agcggctcct cgcgggtcgc acccgccatc 240
gtcggggccg ccgtggcctc cttcttcgcy tactacattc actgagccgc cggacgagga 300
gccggagccg gaggaagag accaaggtgg ggggagagac ttggctgcgc tgcgtgctc 360
tgctgctcnc gcgcattccc gatg 384

<210> 5484
<211> 375
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-G5

<400> 5484

ccacgcgtcc gcggcaaag acctcaagaa agtgtcgtc ttctcccga ctgcaccta 60
cgccgtggct tccatctccg gattcgacct ccgcacccct tcccacagca cccaagcaga 120
ccacagcaac ggctgcaacc cctgctggaa cgcgtggta cacttccca tcccggctgc 180
cgctgacacc cgcggcctcg cactccacgt gaggtccgc gccagcgtc tatacctggg 240
cgatcgcgac atcggcgagg tgtttggtcc catcgacgac ctctggccg gcgccgacaa 300
gggtggcgat ccgaggcccg tgagctacca agtgcgcagg ccgcactctg ggccgcacca 360
aaggggtccc ctaaa 375

<210> 5485
<211> 201
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-028-Q1-E1-G6

<400> 5485

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tcgatctcgg gattcatcat ccgcatcatc tactgctgca caggaggagg atagactgcc 120
cgggtgcta at ccagctgtcg agcagtggta cacttcacca tccaggcgcc cgctcacact 180
cgcagactcg catcctacgt g 201

<210> 5486
<211> 386
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-028-Q1-E1-G8

<400> 5486

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gccacgatga gcatggtggc gcaggacacg cagaactgcg acgaggagtt caggaaggcc 120
gtctccaaga accccatgga ggaccacaac aggtcgctca tcgagatgtc cgagatctgc 180
cgcacgctct ccaacatgat cccttacgaa catgtccatt gatttggttg tttctttttc 240
ccgaccccct actacgttcg gtaacgtcgt cgtcgtcgtc gtcgtcgtcg tccggcctaa 300
aacatatgta atttgatgct ggtcgcgtgt gtctgtcagt cgatagactg gacgcatgcc 360
gacttcatgc ggacctancg cgtgtc 386

<210> 5487
<211> 377
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-G9

<400> 5487

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agatctgccc gattccgccg ccggaacccg gggactccct cccctcctcg atccgttcgg 120
 gcggccggcc ggcctagctt caagtgcggg gatggtgttc tacttcaagg cgcgccccga 180
 ggccggcgac tataccatct tcatgggtct tgacaagtac gagaacgagg acctcatcaa 240
 atacggcttc cccgaggaca tctggttcca tgtagataag atgtcctctg cacatgtgta 300
 tgtgagattg aataaaggtc aatcaatgga tgacatgagt gagggtttgc tggaagactg 360
 tgcgagctt gtcaaag 377

<210> 5488

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-H10

<400> 5488

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 ccgggcaaca actcagccgc cgcaaccgcc acatcagcca tgggcgcctg cgcaaccaag 120
 cccaagacgc ttgaggggca ggccccagct gaggccgccg tctccacacc caaggttgcg 180
 cccgaggcca ctccaatctc cgttgaggtt gcggtgatg aacaggtagc tgagaagggtg 240
 gtggtggagg agccggctgc ggccggccgac gttgagcatc agaaggctaa tgagggtgctc 300
 gctccagagg cggtcgtcgc cgagccccgac cacaaggagg acgaagccgt ggaga 355

<210> 5489

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-H11

<400> 5489

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 gacaggatgt cgtggcagac atacgtcgat gagcacctca tgtgcgagat cgagggccac 120
 cacctgacct ccgtgccat agtcggccac gacggcgccg tttgggcca gagcaccgca 180
 tttccacagt tcaagacaga ggagatgacc aacatcatga aggacttcga cgagccccggg 240
 ttctggccc cgaccggcct cttcctcggc ccaccaagt acatggtcac ccaaggcgag 300

cccggcgctg tcatccgcgg gaagaagggg tctggaggca taactgtgaa gaagacaggg 360
caagcgatgg tgggccggca tctacgacga gcccatgacc cccg 404

<210> 5490
<211> 374
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-H3

<400> 5490

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gttcatgctt caatagtctg gttgttcacg ggatgttctg ttctccctat cacggtaact 120
atatgatgat gatccttgct ttaattcatg aacacttggt tcaagattat gtccattaca 180
ttttgcttgc attgtcaaga ttgtggattc ttgggtgttca tgacgttgta atgttaatga 240
accggctggg aacgccatgt ggtactggta cccctgtatt ttcagttgct gtggcacctt 300
ggctctctct ttgaaaaacc agtatgtata tgacaatgat caatttatcc atattcctac 360
ttcattccca aaaa 374

<210> 5491
<211> 346
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-028-Q1-E1-H5

<400> 5491

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ctctgtcgcc cttcgttcac ctctccttcc tctcgtccct gcctgccagg gagaggggaa 120
gtcagaggca cggagtggcg cagagcagac gcccgatgaac cattgtagct gtccctgtcg 180
tcgtcgtcgt caacgaaccc acacaaggaa aggatggaga agaagccgac catcctcatg 240
aacaggtacg agctcgggcg cacgctcggg cagggcacct tcgccaaggt gtaccacggc 300
cggaacctcg cgtccggcga gagcgtggcc atcaaggtca tcgaca 346

<210> 5492
<211> 335

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-028-Q1-E1-H6

 <400> 5492

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 ccagcacgag atactagcca tcatgcgcct gtcgtccctc ctctctgctg tggccgcctt 120
 ctccggcgcgc gccgcggcgc agcaggtgcc gccggtgggc ggcagcgctc tgaagccgga 180
 ctactacagc cagtctgtcc cgcgcgcgga gcggatcctc gcggaggtga tgcagacgaa 240
 gcagatggcg aacccgacga cggccgcggg catgctgcgc gtcttcttcc acgactgctt 300
 cgtcaccggg tgcgacgcgt cagtctgat cgcgt 335

<210> 5493
 <211> 337
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-028-Q1-E1-H7

 <400> 5493

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 ttcttggtga ggggcgcgtg gtgcggtcct cccaaagtcc cccagggcaa gaacatcacg 120
 gccacctatg gcaaggactg gctggacgct aaagcgacat ggtatggcaa gccgacgggt 180
 gccggtcccg acgataacgg tggcggtgc ggggtacaagg acgtgaacaa gcccccttc 240
 aatagcatgg gcgcatgcgg caacatcccc atcttcaagg atggtctggg ttgtgggtcc 300
 tgcttcgaga tcaagtgcga taagcctgtg gagtgt 337

<210> 5494
 <211> 433
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-033-Q1-E1-H6

 <400> 5494

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 ggcattggagg aagtagctgt ttgcctatg atcgttgccg ccgtagtgct ggacaacaat 120

ggcgccgacg cgggtctctg cactgccatc cctagcgtaa caataagcct agaggagaaa 180
gaaaatatca atgggggatgt tcccacgac acctcgggcg caagcaacga ggaggaggcg 240
ttgttcagtg tcggagaatc caccaaggac gatggccatc gcttgacgat ggaatgcacc 300
actcccgctc cctccagtag cccttccact cgcaagaagc gcggggcggt cagcctcttc 360
agggcgatgt tctgtcctt cgcccgagc gacgacagca tgaagaagac agacgacgac 420
accacgagcc cca 433

<210> 5495
<211> 311
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-033-Q1-E1-H7

<400> 5495
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ggacatggag gatataacag ctgcgccaaag gatagtgtct tcttcgcggg tgaaaaccgt 120
gggtgcagca ccggttacgg ggacttcac ctgtagtggt actcgcagat gctgctggag 180
cacggctaca tcactctgtc gggcaccact tccgtgttcg gatccgcgcc cgtggacgtc 240
tccgtgaatg tgggaggcat ccactgggac taaggcagac ggtcgcagac cccatgtctc 300
atcgttggt a 311

<210> 5496
<211> 351
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-033-Q1-E1-H9

<400> 5496
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tcaccacagg ttttccatta acctctctgt ctgcctctcg aagttactca accgggtgtt 120
cgggtgtgcc aagattacct tggtcattct ctacacatgt tgtcaactag ggtcacacgg 180
aaagtttata tattatcata ccattagagt tatagaattg gttcccaaac ctggagtagt 240

atgtcattct aattcattcg ttcctgcagc tttgactttc gggaccgcac ctctgcaaag 300
 ttcattctgtt atcaagttca aataatagga gtttccttac gttaacacat t 351

<210> 5497
 <211> 437
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-A1

<400> 5497

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 ctgcaagaaa gtcccaactg aagggtgcaa aaagttcaga catcagagga ggggaatcctg 120
 caaaaaagtc atcgccctta cagaaaaagc tgagtgtctc ctcaccaacg gtaactaaga 180
 agagcggaac tgaaggaaag aaaactccaa atggaaaaac aggagccaag aagtaagcaa 240
 ctcaattgaa acttcgtttt gttgggacca acttcacat ggccggggac agataaacat 300
 gttgatccta tctactgggt gatacattgg tgttttgaca cacggatatg tcagtcctat 360
 tggttgagag agcatgctgg atcttcggcc atatgctgta aatcgcttgt taatttttgt 420
 tctactagta cacgaag 437

<210> 5498
 <211> 401
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-A10

<400> 5498

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 actccctcca cctcgacgc tacgccttct tcggcgctcg gatggggcct gggacgtggt 120
 cgccggagat gaggaagacg tacaacctac tggacacggt gagccggcac acgatccagg 180
 tgtacccgag gtcattgacg gcatcatgc tgacattcga caacgcgggc atgtggagcg 240
 tccgggtcaa cgtctgggag cgttactacc tcggggagca gttctacatc agcgtcatct 300
 cgccggcgcg gtcgtgctgc gacgagtaca acatgcccga caacgccttc cgctgcggca 360
 aggtcgtggg gctgcccgtg ccgccatcct acgccccgc g 401

<210> 5499
 <211> 409
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-A12

<400> 5499

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gtgtctagaat tcccggggccg acccacgcgt ccacccacgc gtccgcccgc gatcgcggtc   60
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cgatgaagtc ggtggagaag agctggagct tgtcgccgag gcccttggcg aagacctcgg   180
cgatgaacat ccgcgcgtag ccgtggatcc gcctcgtcac gggccacacg cacaccaccg   240
ggttgctggg cctggggcgc accgtgttct ccaccggta caagaacctg cggcccccca   300
ccggcggtcg ctgccccagg aacttgaggt tgctctcgaa cttggtctcc ggcagggtccg   360
tgtcgatcca gttgtccctg aggtaccgcg cgctccacaa gggctcccc   409
  
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<210> 5500
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-A4

<400> 5500

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ggtcaagaat taccgggtcg acccacgcgt ccatgtccat ctacgggtgct tctgctcgcc   60
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ctcaaacagg attgggaggg agagcctcaa ggcgggggat catatctact cctggagggc   180
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aagaggaaga ggacaggagg tcggaacagg aactgtcgtc gatattattc ttgtgagttc   300
cacccccaaa cgaagcaaca cgccttgccc ggtgtgcacc gacgaaacca gcgacagcag   360
cacagagacg aacggcggtg tatcctcctg tctcagctgc ttcctacctg ggggtgctct   420
ctaccgtgtc gagtac   436
  
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<210> 5501
 <211> 408
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-034-Q1-E1-A5

<400> 5501

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acatcagatg ggaagcttat aacagaaatt gatgggaaac aaattggtgc tgttcggagc 120

aaagatcttt gcaaggcttt cttcgacatg tatattggtg attcacgggt ttcactggag 180

gccaaaaaag tcgttgccca gaacgtggct gggctcattg gaagacgctg aggatagcga 240

gaggatgggt atttcattct tctgtacagt tagagaggat tcatatgagc gggaaaatag 300

gccaaagtatg tagagtgatc tgtcttgtat agaaagcagg caaaaaggtc caatgtatat 360

gtggaaggta ncatcttcag ttgtgctang cctccattct tttttttt 408

<210> 5502

<211> 398

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-A6

<400> 5502

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ggagctgtac ctccgcgcct ccgagctcca gaaggagggc aagaagatta tcttcaccaa 120

cgtcggggcaa ccgcacgccc tcggccagaa gccgctcacc ttcccgcgcc aggtggtggc 180

gctgtgccag gctccgttcc tcctcgatga ccccaatgtc ggctcatgt tcccgccga 240

tgccatcgtg cgggccaagc gctatctcgc catggcgccg ggaggtctaa gtgcgtacag 300

tgatgcccgt ggtatccccg gaatcaggaa ggaagttgct gacttcatcc acaagcgtga 360

tggatatccg agtgatccag aactcattta cctcacag 398

<210> 5503

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-A7

<400> 5503

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 tggttggagc ggttttccta aatctactct tagaaaatga tcgagcggtc gacattcttt 180
 actgcataac cttcaaactg atggatcaga aatggcttga aatgcacgcc agttacatgg 240
 atttcaatac ggttattaaa tcaacacggc gccagctcga gagggagctg ttgctagaag 300
 atatccagag aatcgaggac atgccatcgt acaggtttct cgctgctag caattgaacc 360
 tcctggtcgt accgaacatt gccacaagat agtgcagctc catacactcg aag 413

<210> 5504
 <211> 272
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-A8

<400> 5504
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 agccagcaca tccaaataaa accgagagac ctcagccctc aggcaagccg accgccgacg 120
 taccaccgcg ccaggccgag agaaagatgg agattatcaa gaggatcctc atcgccgcgc 180
 tcctcgtaat cgccgtctct gacaccgcag tgctggcctc caccgaggcc gccgcctccg 240
 gtaccccagc cgcttcagaa tcgtcagcgt cc 272

<210> 5505
 <211> 141
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-034-Q1-E1-A9

<400> 5505
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 aaatggcaac cgggtgtcgg ttattcttgt ctgcatgtcg ttactcggat gttatagtag 120
 aacgaactgt tcgtactgca a 141

<210> 5506

<211> 423
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-B10

<400> 5506

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aagcaattaa ggaatctaag ggagagaata cctattggaa tgtgggtcaa ataaaagcat 180
atcttggttt atctggagga tacaatatcc aaaatttggc cgatcacttt catgagcgtg 240
gtctttatcg ttcaatatct ctcagcataa tggagggaga ggaatcactg ccacattact 300
cacctgaaat tgcgcgcaaa aaattaagtg cagaaacat atctctacta cctcagattg 360
tactattgca tggaacagca gattactcca taccatcatc tgccagcgaa acttttgctg 420
atg 423
  
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<210> 5507
 <211> 405
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-B11

<400> 5507

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tggtcaaggg gagcagactt atgttattgt ggaggcatcc aagttcaaga gggttggcag 180
gaagactacc ttgcggcagg atttggccaa tgctctagat ataagggcct tcgagaggat 240
gacgaagcta ggccactgcy atgtggagct tcttagaaaa gagatgaatg agactgatgt 300
ccccgtatct tactcaggca ctggcatccc tgagaagtca atacgcaaag cagctcttga 360
ggttattctc cgcaggtccc tctcttttct caagccagac acctt 405
  
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<210> 5508
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-B12

<400> 5508

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ccgctaacgt aacggaaata gcaaaggcgc gcaagctgat cgatgtccat ggccacgggc 120
tgtgcccggg gcggttcgag cacacgcgcg ggatcagcgc ggtggccagc agctgcaagg 180
accgcccgtt gccgtcgccg gagcgtgtct gcggggcgct caaggcctac gcgtgcccct 240
acagcgagct catcaacgac aacgccaaca acggttgccg cagcgagatg ttctacgtca 300
tcatgacacg cggcaggctg cggccggggc tcttctcgca gctgtgctc gaaggccgcg 360
tgggcctcca gtgctgatca aactggcct gctgccgcc aacgcccgga atccaaccat 420
ccaaccaacc 430

<210> 5509

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-B3

<400> 5509

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gctgcgcccg caacatgaac tgagcccagc gctagctgtc gccggggcgc gccgtcgctc 120
ccgagccggg cggctctggc tggctctggc tgcttgctg ccaggtcacg cagcctggct 180
ccaccgatcg cacaccatac attgacgtcg tcgtcgccgc cgtacgtgcc gttggacggg 240
ggaggaggcg gtggcgctac gacagtatat atatacaca ttacacatac acaccccaaa 300
aagaaaagaa aaaaactact gccattgctg tcgttgctgc tagcttctct ctatatatat 360
accggtatct aaattctcga caaaatttgt ttgaccacgg tgatctgtca tatatgtcgt 420
cca 423

<210> 5510

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-B5

<400> 5510

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tggtcgccgg ccatggttca agaaaggcag caagaaggag cagcacagat ggcagaggca 120

cggcatgatc acattgaaac ggcgtgatca aaacaggaga tgctgcgagc agatgaaagg 180

gatggaacga gttggggccat gagctctcct gatgagcagg tgttttttttc agggctggac 240

agacagacag ccccatgcc a tcagggaag ctgagatgga agtggaagct gttgtagtgg 300

ggttttcagg tttcatgcaa ccagattttg ctctacctga actagacaac aatgttggtg 360

ctgctgctgt tgtacaagat ctttttttgt gctcgcttgt gatgataata tgcattggcaa 420

gctccaaaat gtg 433

<210> 5511

<211> 434

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-034-Q1-E1-B6

<400> 5511

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taacctccgt ccatcccatc cccgctcgcc tctccagtct cctctcctcg ccccgctcta 120

gacgatcgat ggccgcgacg gcggcggagg agatggagag gatggtggag gcggagtggg 180

aggaggggat gaggganggg aagcggtagc ggctggtgga gtaccgggag ctgccggctt 240

acctgcggga caacgagtac atccaccgcc actaccgtg cgagtggccg ctcccgagg 300

ttctgctctc cgccttctcc atccacaacg agaccctcaa cgtctggacg catcttatag 360

gatttttcat ctttctcgct ctgaccatat acacagcagc acaagttcca aatgcagtag 420

atatcgggag cttg 434

<210> 5512

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-B8

<400> 5512

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 ccgtggaggc aatgccgacc gtggaaatcg ccggcggcaa cgatggcgac gacgcggcca 120
 gctgcccggc ctgcctggag gactacgcgc ccggcgagcg cgcgcgcgag atgccctgca 180
 ggcacaggtt ccacggcaat tgcacgtgc cgtggctcga gatgcacagc tctgcccctg 240
 tctgccggtt ccagctgccg gccaccgacg acaagagctc atgcagcggc ggcgacggtg 300
 gtttcgtcag tgtcgatgcg gatcgtgaag gcagtgacaa cggcgggggt gatggtaggg 360
 caagctctcc gggcaacgcc gagctagctg aagctgaaga g 401

<210> 5513
 <211> 428
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-034-Q1-E1-C1
 <400> 5513

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 tcgggcgcca cgctcgtggt cggcgccgcg ccgctggagg tctccgtgaa ggtggccggc 120
 atccactggc actacggcag ccggtccac gcaccggagc tcaccgcggt ctactacaac 180
 acgcggcgcc acgacgggta cctcaccatc gcgcgcctcc tggcgcgcca cggcgccgtg 240
 ctcaacttca cctgcgtgga gatgcgggac cacgagcagc cgcaggaggc gcggtgcatg 300
 ccggaggcgc tggtcgggca ggtgggcgcc gcggcgcgcg ccgccgggggt gggcctcgcg 360
 ggcgagaacg cgctgccgcg gtacgacggc acggcgcaac accaggtggt caccacggcc 420
 gccgagcg 428

<210> 5514
 <211> 362
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-034-Q1-E1-C10
 <400> 5514

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 gaaggacgtg agcgacgtga cgggtgtgga ttgcgtgctt aggaacacca ccaacggcgt 120

gcgcacatcaag tcgtaggagg aggccgagtc tgtgctcacg gcgtcccatc tcaccttcga 180
gaacatcagg atggaggagg tggccaaccc catcatcacc gaccagtact tctgccccca 240
gaaggtctgc cccggcaagc gaagcaactc ctgcgatgac tccatcaaga acgtcacctt 300
ccgcaacatc tccggcacgt cgtccacgcc cgaagccgac agcctgctct gctccgagac 360
gc 362

<210> 5515
<211> 392
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-C11

<400> 5515
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gcactccttt ttctatcgaa gagattactg aaagggaaat gtgcccttgg gccatttcta 120
agtatttttg gattgagtgac caacacaagt gcttaaagtga gaatttatgc tcatggatgg 180
ataaagtgc aatcaatagt aaaggatagt ttctaagcct tagtacattg gttttgtgta 240
ctaataactc tgtctaagtg ttagaaacag aaagaagaag aaaagaaaag aggtgaaaaa 300
gacttggttg tgtacagcta aaactcagct cagtctggca caccggactg tccgggtggtg 360
caccggacag tgtccggtgc gccaggctga ct 392

<210> 5516
<211> 381
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-C12

<400> 5516
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gaatctgcc aacctctcaa cacgaagatg gcgttcacga gcaatgtcgc agtgaaggcg 120
gcggccgtgg ccgcggtgct gctggctgca gcggtgtcgc ctgccgcgcg cgcggcggcg 180
gtggcggtgg cgggaggggc gccgtcggtg ccggcggggc cgctggacat cgcgcagctg 240
ggcgccaagg gcgacggcaa gtcggacagc accccgatga tccctaaggc gtggaagaac 300

gcgtgcgagg cgacgggggt acagaagatc gtcacccgc cgggcaacta cctgacgggc 360
 gggctggagc tgaagggcc c 381

<210> 5517
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-C2

<400> 5517

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 ttaagcctcc ccgaccgcca catctattag gtgcagccat gggtgctgt gcaacgaagc 120
 ctaagacgct tgaggggaaa gccccagctg aggccaccat ctccacaccc aaggttgac 180
 ctgagaccac taccatccac attgaggttg cggcaaaaca tgcagtagtt gagaaggtgg 240
 aggaggacaa ggaggaggca ctaacagtgg cggcgaaaca agagccagca gccaccattg 300
 agcctcagca gattgctagt gaggtgacca cttcggaagt ggcggtcgtc gttgtcgagc 360
 ctgagaacaa agaggaggag gaagttgtgg agaagaccgt catcgagaag gagaagccat 420
 c 421

<210> 5518
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-C3

<400> 5518

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 cagctgaggc cgccgtctcc acaccaagg ttgcgccga ggccactcca atctccgttg 120
 aggttgcggc tgatgaacag gtagctgaga aggtggtggt ggaggagccg gctgcggcgg 180
 ccgacgttga gcatcagaag gctaattgagg tgctcgctcc agaggcggcc gtcgccgagc 240
 ccgaccacaa ggaggaggaa gccgtggaga agaccgtcgt cgaggaggag aagccagcgg 300
 cagcagccca tgcagaggaa aaggtcgcca ccgccgccga gaccacgacg acggtggagg 360
 cgaagaagaa cgccgaggag gccgggaagg agaagctggc gcagcagagc tgatcgactg 420

tccgtgcatg

430

<210> 5519

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-C4

<400> 5519

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tctctgtgga gctccatcgt cagcttcgag aagcgcgagc agttcgagga gcgcgccgag 120
accatcctcc acctgctcaa gctccagttc cccggcacgc cgcagtcgca gctcgacatc 180
tccaagatac agtacaacag ggacgtcggg tacgccctcc tggagagcta ctgcgcgtg 240
ctcgagagcc tggcgtagag cgtcatgtcc cgcacgaggg acgtgctgag cgcggacgcg 300
gcggcgacga acctgacggc gagcgaggcg gcgcggcgag cgctggagtc gacgtcgggg 360
gagctgcccg cggggcgagg agcttgacgc caaggaggag ctggagaagc tgaacg 416

<210> 5520

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-C5

<400> 5520

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gtgccccgag gggaaagtgc cgctcatctc catcaacgcc ctgcaccagc tgcacatctt 120
catcttcgtc ctgcgcgtct tccacgtctc ctacagcgca atcaccatgg cgctcggcag 180
ggccaagata cgtgcatgga aagagtggga gaaagaagct gcaggacaag actacgagtt 240
ctcacatgac ccgacgcggt tcaggttcac ccacgagact tccttcgtga ggcagcatat 300
gaatgtgctg aacaagttcc cagcatcatt ctacatcagc aacttcttcc ggcagttctt 360
caggtccgtg aggcaggcag actactgcgc gctgcgccac agctttgtca acgtccatct 420
ggccctt 427

<210> 5521
 <211> 394
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-034-Q1-E1-C6

 <400> 5521

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 tccgacgacg acgacgtgcc gccacatcca catggcggac gacgccgtcg cggcgggagc 120
 ggccgttcgc tgcgcagggc cggcgccggc ctcgctgtct tctagcagga agcagcagca 180
 gcagcccgcg gacgcgggct gcggcagcag cgacgaccac taccagcacg acgtgatcat 240
 gctgaggcgg acgaggagcg ggcgggcggt cccgccgcgg atctccgtga tcggcaaggg 300
 cgggcggccg tggctctgcc tgcgggcgca ccgcgagggt ggacgcctcg tgctgcggca 360
 gatgcgcctg ccgtcgcagg agctgctgca gccc 394

<210> 5522
 <211> 372
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-034-Q1-E1-C7

 <400> 5522

 ccacgcgtca ggagctgctc aactccaggg tgggtgtccag ccacttcagc ccggcgtgcc 60
 ccacgtacag cccgcacaag aagtgatgac ctaatagcat tggccgtcgg agctcggagg 120
 ctgggggttca cggtcacggc ccagactgag ctactacact tctgctagta ctatatattg 180
 ctacttggtg ctctctacag tgcgtgtctt tcggttcctt ctcgtcatct cgtgtgcaag 240
 gcagaggagt gaattagtca cgctcctgcc agattctgcc tggctctgtg ataactctta 300
 ctccactgct agttgttaca tatacttggtg cgcatgtgca tttctcgagg agatgactag 360
 tgtttgtagc tg 372

<210> 5523
 <211> 418
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-034-Q1-E1-C8

<400> 5523

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gactttgccc agcttctctt tgaaatgcaa tggaccattg ttaaccaggc cagagcatac 180

gcaagagcga tgaaggcgac cctcttcttc tcgagcgga cgcacaacat caacgtgaac 240

aagatcttca agttcatcac ggccaagttc ttcgacctgc cgtggacggg ggagcgcaac 300

ctcaccatcg gcgagcccat catagacttc tgacgacctc ctctctagc taagtaatta 360

tgcagcacac acgacgaccc ttgtcggtat gatgggttga cagggtcgtc gcctcttc 418

<210> 5524

<211> 404

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-034-Q1-E1-D1

<400> 5524

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ggcgtggggc gccccgcggg cgtgctcatc aacggcaagg gcggaagga cctggaggcc 120

gcgcctgcct tcaccttcga ggccggcaag acgtaccgcc tccgcgtctg caacaccggg 180

atcaaggcgt cgctcaactt ccgcatccag ggccactaca tgaagctggg cgagctggan 240

ggctcccaca cctgcagaa cacgtacgac tcgctcgacg tccacgtcgg cactgcctc 300

tccgtgctcg tcggcgccga ccagaagccc ggcgactact acatggtggc ctccacgcgg 360

ttcatccacg acgccaagtc cgcgtccgcc gtcacccgct acgc 404

<210> 5525

<211> 263

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-D10

<400> 5525

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caggaacata tcagtcgatc atggacggat tcgtaggcct cttgaaagtc cggggtaggg 120
 ggggcatcaa ccttgccata cgcgacgcag gatgcagcga tccgtatgtc gtcctacgac 180
 ttggcaagaa gaaacttaag acgagcgtca agaagagatc tgtcaacccc atctggcacg 240
 aggagctaac cccgaccgtc aca 263

<210> 5526
 <211> 398
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-034-Q1-E1-D11
 <400> 5526

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 aatgcatctc catgagcgta ctcttggtgt tcttgccctgc cgttatgttg atgaagtcag 120
 ggttggtgca ccatgggaag tttcaaagga catgatcact acgtttaaca tttcattggt 180
 tgtccatggg actgtagctg agggcaattc agctggtgaa attgatcctt atgctgttcc 240
 aaagagcatg gggattttcc agacaatcag gagcccaaaa tctataacaa cattgtcagt 300
 ggcgacaaga atagttgaca atcatgaagc ttacaagaag aggaacctga aaaagaaggc 360
 tagcgaagac cgggtactaca cacaaaagaa attccttt 398

<210> 5527
 <211> 444
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-034-Q1-E1-D2
 <400> 5527

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 ccgtcgaccg caaccagcag tggttccgtc gccggcgcg gattgggcca ccagccgcgg 120
 ttgtcgatcg gccgattgat tgattgatcg atcgatcgat cagtccaccg cggcaaggcc 180
 ggggagggag ccgtcgtcgg tggttcctgg cggttgcatg tatgcgggcg gggagagccg 240
 gcccaatggt gggggcgag gcggagacgc gctcaggcg cgagggcagc ccggcccgtc 300
 cgctctccc gctgcgtcgt cgtccggcag gggagcggag gaggaaggcg gggaggagcg 360

tgggcgaggc cagaagcaac cgcggcgcaa gaagcagcag gggaggcgcg aggcggtggc 420
cagggcgatc cggggcgggc tgcc 444

<210> 5528
<211> 372
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-D3

<400> 5528

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gcgagcgcca cgcggtatcgt gatctacatc caccggagga ggaaggggaa aaaagagagg 120
ctcaccgggt gattgccgtt gatgccgagg cgagcaaggc gagacgatcg gtacaattag 180
ctcataggcc tatgtaagtt aggatttttt tttttgcagg taaagaattg catagaggcg 240
tgtagatcat atagcgtaga tagatggcac tggtagccat gccgatgaag atcttttgtg 300
ctgaactaga acaaaattaa agaggatgca ttaagtcttg tgggtgtata aactagagg 360
gtctatatgg tg 372

<210> 5529
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-D4

<400> 5529

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tgaggaggcg gccgtcgggtg cccgctggcg cgctggacat cgcgagctg ggcgccaagg 180
gcgacggcaa gtcggacagc accccgatgg tgctcaaggc gtggaagcac gcgtgcyagg 240
cgacggggca gcagaagatc gtcattccca agggcaacta cctgacgggc gcgctggacc 300
tggtggggcc ctgcaagtcc tccatcatca tccgcctcga cggcaacctg ctcggcaccg 360
gcgacctcaa cgcgtagaag aggaactgga tcgagatcca gaacgtc 407

<210> 5530

<211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-D5

<400> 5530

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ggaaaagggg gtcagaccgt aactaagagc tatttagcaa taatacatac atagctatac 180
cctcttttagg tcaagagggg ggagttctcc ttattcggag gaagagctcc atcctcattc 240
tacaagacca aaccaataaa tggcctctag ccacacgtcc tcgccatcat cctccaagaa 300
gtcgccgcca ccacaagaag catcagcttt ggcgcaaaa tcatcttcaa agtcaccctc 360
gccaccaaag ggtgaatcaa attcatctcc cagtcccgca tcgaaatcgt ccctgggc 418
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<210> 5531
 <211> 429
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-D6

<400> 5531

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gtaattggat cgagattcta cgcgtggata acctggtcac caccggcaag ggaaaccttg 180
acgggcaggg ccagccgtg tggagcaaga actcctgcac caagaagtac gactgcaaga 240
tccttcccaa ctgctgggtg atggacttcg tgaacaacgg ggaggtgtcc ggggtcacgc 300
tgctcaactc caagttcttc cacatgaaca tgtaccggtg caaggacatg ctgatcaagg 360
acgtgaccgt gacggcgccc ggggacagcc ccaacaccga tggcatccac atgggcgact 420
catccggga 429
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<210> 5532
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-D7

<400> 5532

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ttctcttctc ccattccttc cttccactec cccgcccagc gccaccatgg cctcctccgt 120
cgcggtgtcc ctccgggccc tcgctgcgc cccgctcccc aagtccagcc ccgccacttc 180
ctgccccctc ttctgtctcc ttgcgcggc gctgccccga cgctgtctcc gctcctccgt 240
cgcacgccgc ctgcgcctcg ccccgctcgc cgcctccgat tccgccttcg agtcctccgt 300
cggagttaac tacggggagc ccgacgactc ggagaaggat aaggaggtgg agttgttcgg 360
atcgggtgac gacgaggggg cggtgagtt ggtggatgac cattccgtag acgtctcagc 420
cgctgt 426

<210> 5533

<211> 231

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-D8

<400> 5533

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cacaagcacg agataccagc caccatgcgc ctgtccctcc tcatcgatc cgtggcagcc 120
atctcggcgc gcaccgctgg ggatactccg ctggcaggcg gcggctgtgg agccctgaag 180
ccggacttct atagccagtc atgccgcgc gctgatecga tcattgcgga g 231

<210> 5534

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-D9

<400> 5534

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tggcggtggt cgtcgggtgtg gtcgccaccg tcaccgcctc cggcaagaag gccggcgacg 120
gggtcacggt cccgggggag gcttcaattg ccacgtccgg caagtcggtc aagtcctgt 180

gcgcgcccac cctatacaag gagtcgtgcg agaagacact gtcccaggcc accaatggca 240
 ccgagaaccc caaggatgtg ttccacagcg tggccaacgt ggcgctggag tcggtccaga 300
 cggcggtcga gcagtccaag tcgatcggcg aggccaaggc cagcgactcc atgaccgaga 360
 gcgcgcccga ggactgcaag aagctcctgg aagac 395

<210> 5535
 <211> 430
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-034-Q1-E1-E1

<400> 5535

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 tctanggagg cttgtcgggt tcgtcgggcy ggaggggagg agatgggcgc ccggaacagc 180
 gctgccgcca cgccggtgct gctcaacgtg tacgacctta cggccgcgaa cgattacctc 240
 tactggctcg gcttcggcgt cttccactcc ggaatcgaag tccatggcac ggaatatggg 300
 tttggagccc acgactaccc atccagtggg gtgtttgagg tggaatcaaa gagttgcctt 360
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 cgctcgttta 430

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 <211> 437
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-E11

<400> 5536

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 tggagcgtcc ggtccaacgt ctgggagcgg tactacctcg gggagcagtt ctacatcagc 180
 gtcactctgc cggcgcggtc gctgcgcgac gagtacaaca tgcccgacaa cgcctccgc 240
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cgaaggcgcc gttttcacct cgtgttctga ccatccagtc taactaatcc attcctgtgc 360
 tgctcggcga aataaaatca tcaaaaagaa caaagacgaa agaagcctat ggaaaggaaa 420
 aaggaacttt ggttggg 437

<210> 5537
 <211> 61
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-E12

<400> 5537

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 a 61

<210> 5538
 <211> 446
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-034-Q1-E1-E2

<400> 5538

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 cgaagcagcg gacgacgctg gtgttcacgt acgggacgct gaagcgcggc ttctccaacc 180
 accgcctcct ggaggagctc ttcgcgagcg gggacgcgct gctggtgggc cccgcggtga 240
 cgtcggcgcg gctgccgctg gtgtgcgggc cgtaccgggt gccgttcctt ctgaacctcc 300
 ccggcgccgg cgccggggcg caccgcgtgc gcggggaggc gtacgcggtg acggccccgcg 360
 ggcttgcgcg gctggacgag ctggaggcg tggagacggg gcactacgag cggctggccg 420
 tggccgtgga cctcganggc ggcggg 446

<210> 5539
 <211> 429
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-E3

<400> 5539

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agatctctcc gcgtcttctc gcccaacccc ctccaacaag taacattgac cgcaaacgga 180
tcacgtccg ctgcggtcaa tgtaattaat taagcttctg aatcatacat agcttggcaa 240
atgcctgagg gctagctagc tagacaaggt ccattgagct agcccccttg ggaagaaggg 300
agaggaatgg cgctgggtggc ccgttgagcg aggaagagggc tattgagaac ccgttaacaa 360
gaattgccag cagcatctgg acaatcttgt taacagagtt ccaaagggtc aattccaagc 420
agatacaat 429

<210> 5540

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-E4

<400> 5540

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ggagagcctc aaggcggggg atcatatcta ctctggagg gcggcgtggg tctacgcgca 180
tcacggaata tatgtgggcg atgataaggt gatccatttc acaagaggaa gaggacagga 240
ggtcggaaca ggaactgtcg tcgatattat tcttgtgagt tccaccccaa aacgaagcaa 300
cacgccttgc ccggtgtgca ccgacgaaac cagcgacagc agcacagaga cgaacggcgt 360
ggtatcctcc tgtctcagct gcttcctagc tgggggtgct ctctaccgtt ccgagtac 418

<210> 5541

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-E5

<400> 5541

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 cccccaggc aagaacatca cggccaccta tggcaaggac tggttggacg ctaaagcgac 180
 atggtatggc aagccgacgg gtgccggtcc cgacgacaac ggtggcggtc gcgggtacaa 240
 ggacgtgaac aagccccct tcaatagcat gggcgcatgc ggcaacatcc ccatcttcaa 300
 ggatggtctg ggttgtgggt cctgcttcga gatcaagtgc gataagcctg tggagtgtc 360
 cggcaagccc gtggtggtgc acatcacgga catgaactat gagcctatcg ccgggtaaca 420
 cttcg 425

<210> 5542
 <211> 444
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-F1

<400> 5542

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 gagcgggcgc gaagggacaa gggggcgtgg acaagctccg gtgaggacgg cgctgaatcg 180
 accttcgacc cttggctcgg ggaaacgcga gcacgcagcg actcggggaa gcgctgggga 240
 tcggaagcgc ggaccggcac ggggaatgtc gagcgaccgg cgacgacggg gaggccccag 300
 cgaccgggtg ggctgtgggc ggcggcgaat ctaccgcgcg aggtcgcgat aaacaatgtt 360
 atgtgcaagg ataatatct tactaagagc tgatttggtg attaggtatc ccaaggggat 420
 ccatggggga ggaatccctt ccaa 444

<210> 5543
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-034-Q1-E1-F10

<400> 5543

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tcgcatgtct ccatcaagaa cgtcaccttc cgcaacatct ccggcacgtc gtccacgccc 120
 ggggccgtca gcctgctctg ctccgagacg cagccgtgca gggcggtctc gtcacatgat 180
 gtcaacgtcg agtacgccg caagaacaac aagaccatgg ctgtgtgcag caacgccaag 240
 ggaaccgcca aggggaagcct ccaggccctg gattgcctcg tctgatgat gaccttgcat 300
 ttgcatgcat tttttctccg tttcactttt ccatattcta ttgcgttcca gccaaagcatc 360
 ttgtttcttt tatatatata tatatatata tatatgcatg gaaataaatt tatggggggg 420
 g 421

<210> 5544
 <211> 399
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-040-Q1-E1-H6
 <400> 5544

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 caacaagggg caccggcatc cgctgcccaa gtttggggag tgggacgtga agaatccggc 180
 cagtcgcgag ggcttcaccg tcatattcca gaaggccccg gacgacaaga agaccaccac 240
 cggccctggg gctgggaacg cgcgcgcagg cattccgcgg gccttcagga acggcgggcg 300
 cgacggcggg tacaggcccg acttcggcga cggcaaccag tacacgccgc ccaaacggaa 360
 gaagtgggccc ttctgtggct gctgaatcga agctcgtctg 399

<210> 5545
 <211> 259
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-040-Q1-E1-H7
 <400> 5545

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 caccagcggg cgcataaag cgggtggccag gccacgtggc gccatggcgg tgggcatgtc 180

cagccgggac gcgtgggcgg cggcgtacag cggggtcgcc gccggggctg ccctcgtcag 240
 tgggatcggc gtcattggcg 259

<210> 5546
 <211> 372
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-A10

<400> 5546

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 gccgtcgctc tctccaacgt cccctcctcg ggcgccctgg cctcctcgtc gtcgtctctg 180
 ctgcaccagt cgtctccgtc tgagagtggc actgagaccg acagtagcat cggagaatct 240
 tcttcgctgt cgtcgtcgga agaggccggc gagaaggaga aggagaagga gcaggagatg 300
 gagaaggcgg tcgcggcgga gaaggctgcc cagcaggagc tgctcaagta cgccaaggag 360
 aagggcacgt tg 372

<210> 5547
 <211> 399
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-A12

<400> 5547

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 aagtagctgt ttgcctatg atcgttgccg ccgtagtgct ggacaacaat ggcgctgacg 120
 cggctctctg cactgccatc cctagcgtat caataagcct agaggagaaa gaaaatatca 180
 atgggggatgt tcccacgac acctcggccg caagcaacga ggaggaggcg ttgttcagt 240
 tcggagaatc caccaaggac gatggccatc gcttgacgat ggaatgctcc actctcgctc 300
 cctccagtag ccttccagt cgcaagaagc gcggggcggt cagcctcttc agggcgatgt 360
 tcctgtcctt cggccggagc gacgacagca tgaagaaga 399

<210> 5548
 <211> 390
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-041-Q1-E1-A2

 <400> 5548

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 atggcatcat cggccgcgct cttggtgcta gccctcgcgc tagtggcggc caccgcccc 120
 caggtagcgg aggcaaagaa gaagagagcg gcgagagcg gcgaggcggc ggaggcgaag 180
 aagatccagg acgacttctg ctcgacgctg tgcgagggca agaaggggac ggacctggtc 240
 gtgtgcaagg agtcctgcgc gctctcccag cagtccaacc tgggtgctgta cggcaggatc 300
 cagtgcaagg gcaagtgcac cgagcagaag ggcatcacgg cgccggccat gaaggtctgc 360
 cangaggagt gcgacaaggc gtacgtggtg 390

<210> 5549
 <211> 394
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB148-041-Q1-E1-A4

 <400> 5549

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 agctgcggcc tccctccgcc ccaaccagcc atgggttccc gcgttgattg cggcgcttag 120
 acgcggagga ngagagagac acggggaggg ggggaggccg aggcctanga ggcgtancgc 180
 tgtgcanggc gcgagcgcgt tcgttcggca tggaacagaa cgccggctcg ttcttcgccg 240
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 tcgtgggcgt gtccactgcy tggctcggtg aggggctttc atgcgtctgc gcgcagagga 360
 aggagagcga cgtgcgcctg tccttcgatt tgag 394

<210> 5550
 <211> 422
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-041-Q1-E1-A7

<400> 5550

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gtccacttca tcgacctcct cacggccgac ggcgtcacct accataagac atgcttcaag 180
tgcagccact gcaaagggat cctctcgatg tgcagctact cttccatgga cgggtgtgctg 240
tactgcaaga cccacttcca gcagctcttc aaggagaccg ggagcttctc caagaacttc 300
acgccagggtg gcaagtcttc agacaagggt gaactganca ggggccccag caagctatca 360
tcctgcgttt ctggtactca ggataagtgt gcagcttgcc aganaacagt gttaccgctg 420
ga 422

<210> 5551
<211> 419
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-041-Q1-E1-A8

<400> 5551

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ccctcctcca cctttctcct tttcttgcca cggcaaaaca ccttcgccgg cgagagcatg 120
gcgatggcgt accgtgtcct ggaggtcacc ctggtgtcgg caaatgacct caagaaagtg 180
tcgtctttct cccggactcg catctacgcc gtggttcca tctccgatt cgacctccgc 240
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gtggtacact tccccatccc ggctgccgct gacaccgcg gcctcgact ccacgtgagg 360
ctccgcgccc agcgtctata cctgngcgat cgcgacatcg gcgaagtgtt tgtgcccatt 419

<210> 5552
<211> 373
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-A9

<400> 5552

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gccgcgctct tgggtgctagc cctcgcgcta gtggcggcca ccgccccaca ggtagcggag 180

gcaaagaaga agagagcggc ggagagcggc gaggcggcgg aggcgaagaa gatccaggac 240

gacttctgct cgacgctgtg cgagggcaag aaggggacgg acctggctgt gtgcaaggag 300

tctcgcgcgc tctcccagca gtccaacctg gtgctgtacg gcaggatcca gtgcaagggc 360

aagtgcaccg agc 373

<210> 5553

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-B10

<400> 5553

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gcaggcacag gttccactcc aattgcatcg ttccgtggct cgagatgcac agctcctgcc 120

ctgtctgccg gttccagctg ccggccaccg acgacaaggg ctcatgcagc agcggcgacg 180

gtggttttgt cagtgtcgat gcggatggtg aaggcaatga caacggcggc ggtgatggta 240

gggcaagtat tccaggcaat gcggagccag ccgaagccga agagaacggc agccggttgc 300

cgccatcctt gcagtggctc aacagcctgt tctcgccatc ggcgagctcc tccggtagcg 360

gcagcggcag ttgcgcatcat tgggaagaat gagcaataat gcaatat 407

<210> 5554

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-B2

<400> 5554

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gcaagagcaa tggcgatggc atccatagcc tcaccgtcgt cgaggaccct gateccctccg 180
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 cggagccggc cgttcgtctt ctccccgcgc gcggtgtccg actctaagag ctcccagacc 360
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<210> 5555
 <211> 406
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-B3

<400> 5555

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 gaggcgaagg cgaaggctgt gggaggcgcg ccgtcgggtgc ccgtctggctc gctggacatc 180
 gcgcagctgg gcgccaaggg cgacggcaag tcggacagca ccccgatggt gctcaaggcg 240
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 ctgacgggcg ccgtggacct ggtgggcccc tgcaagtcct ccattcatcat ccgcctcgac 360
 ggcaacctgc tcggcaccgg cgacctcaac gcgtacaaga ggaact 406

<210> 5556
 <211> 389
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-B6

<400> 5556

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 acgacgacgt gccgccacat ccacatggcg gacgacgccg tcgccggcgg agcggccggtt 120
 cgctgcgcag ggccggcgcc ggcctcgttg tcttctagca ggaagcagca gcagcagccc 180
 gacgacgccg gctgcggcag cagcgacgac cactaccagc acgacgtgat catgctgagg 240
 cggacgaaga gcgggcgggc gttcccgcgc ccgatctccg tgatcggcaa gggcgggcgg 300

ccgtggctct gcctgcgggc gcaccgcgag ggtggacgcc tcgtgctgcg gcagatgcgc 360
 ctgccgtcgc aggagctgct gcagccctg 389

<210> 5557
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-B7

<400> 5557

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 aagagaaagg tggattggct cactgaaaaa atgcgtacaa ataacttcac cgtatcagct 180
 atgcacggtg acatgcccc acaagaaagg gatgccatta tgggtgagtt caggtctggc 240
 gcaactcgtg tgctaataac tacagatggt tgggctcgag gactggacgt tcagcaggtt 300
 tcacttgtca taaattatga tctcccaa atcgtgagc tttacatcca tcgcattggt 360
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 cgtatactga 430

<210> 5558
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-B8

<400> 5558

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 ctgcccgtcc attccgagga ctgctggggc gacaccgcg tcatctgcac caagacgcac 180
 aactgccggg acgacacttg cgcggggcgc ggcattgccg acggccgctg cactggggag 240
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 ctcggttggt ctacttcgc cggcgatgat ggatggtgcc caactgcgac tgcccagtct 360
 gctccattcg ttgttggtta aagcataata tataaacggc caaatcacat gtattttg 418

<210> 5559
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-C1

<400> 5559

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atgagcattc ttgccacct aggagagaca atagggttagt aacctccaac ataattgcga  180
agcattatct cagtgcgatt aaggacaatc caacatgaaa agttgagttg ataaagaaaag  240
ctgttctaac aacatgtgtg agagttttaa caactccatc atggatgcta ggtactatcc  300
agtcatttcc atgtgtgaag ccattagaaa gaaggttatg gtgaggatac aagagaataa  360
ggccaaggct gagaagtgga caggaacaat ctgtccta atcttcaaga aattaaaaa   419
  
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<210> 5560
 <211> 406
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-041-Q1-E1-C10

<400> 5560

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gacccatctc tctagttata atttttctcc cgtccttgca ttgccaatca catgctatcc  180
attggtaacg cacaacagta aaatgacata catccgacag ctatattatg ttcgacggtg  240
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taactcttgt ctctctctct ctcacttttc cttttgatta naagtaagtg aattacgcga  360
aggtttaatt atttattttg tcaaaactta ggtgaatcat gaaatg                   406
  
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<210> 5561
 <211> 390
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-C12

<400> 5561

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ctattattca ggttcttgac cccaagctac atgaccacct agaaactctt ggtggaggtg 180

actacctttt tgcgttccgt atgttcatgg tgcttttttag gctgaagta tcatttggag 240

actccttata cctctgggag atgatgtggg ctctggaata cgacctgac attttcttcg 300

cagcgtgtga agaacaaggt gcagtagata aaaacaaagt ttctaaatcc aaactgaaag 360

gactgcgcca ttttgggcaa gtgggataat 390

<210> 5562

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-C2

<400> 5562

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catgtgatgt gagtgagttc acggcattgc tagttttcct cttctttatt agtctttatt 120

tggcacgtc cattcacctt ttttcttttag catctggcca gccaaacaga gcaaggggtcc 180

atggctatcg ttttcaaggt cccctactgg gctataaatc cacgacagcg aggctgtggg 240

gcctttggct catgtgaatg atcaaacggg aaatgtcaat ttggttgttg ctagttgctg 300

gtccttttca tgtgacatct gccttcgtct agatgcgatg tttgtccttg gttcacatcg 360

cttctgttgg aacaattatc ctctcgacct tgagcttcag ctaatgattt aggtctgagt 420

tcagattttg a 431

<210> 5563

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-C5

<400> 5563

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catctcgggtt gcttctgcat ttgctgggta tcaggaagct gtgcaagaca gggatcacia 120
attcttgaca aaagcagtgg aagaagcata tcgaggagtc gattgcgggtg acggaggtcc 180
attcggagca gttgtcgtct gtaatgacga agtagtagtc agctgccata acatgggttct 240
gaagcacact gaccctactg cgcattgctga agtaactgca attagagagg cttgcaaaaa 300
gcttgggaaa attgagctct cagactgcca aatttacgag tcctgcgagc catgcccaat 360
gtgctttggt gcagttcatc tctcccgaat caagaggctg gtttatgggg c 411

<210> 5564

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-C6

<400> 5564

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gtgatggcat ggaggtatct gccagcgggg gtggcggcgg caacaagcag ccgcagatca 120
gccttttggg gctgttcctc gcctgcatgg tcgccggcgg cgtgcagtac ggatgggccc 180
tgcagctctc cttctcacc ccctacgtcc agacactggg gattcctcat gctcttacat 240
cagtcattgt gctctgtgga cctattgctg gcttacttgt acaaccctgc gtcggcctct 300
atagtacaaa atgcattctt aagcttggga gacggaggcc attcatcttt acaggatgca 360
tcatcatctg tatatctgtg atagtcacgc gtttctctc a 401

<210> 5565

<211> 392

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-C7

<400> 5565

cgcgggtcga cccacgcgtc cgcggtcgct tggggcagtc ggcgctgcgg cggggagggg 60
cgtccgcgag gcaggtcgag ttggcgggag aagcctcgcc gagagacctc ctccggatgc 120

gcgtggcgga gcgggagcgc gcgaggcggc ggcgtcgga cccgggcccgc gacgagttct 180
tcgtgcccac gccagagtcg ctggcggtgc tgcactcggt ctccctcccc atggtgctca 240
ccgccgcccgc cgtggccctc ttcaccaagc tctcatgat ggaacatgaa gctacagatc 300
aagaaaggag agagcgcaag ataaagaata gccaccctga tcaaggaaca gtaaggatgc 360
tatctcgtga agaatgggac gaggtccaag aa 392

<210> 5566
<211> 387
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-C8

<400> 5566

ccacgcgtcc gcgagagggc cggagcagcc gcagtcgagg cgatcccgc gccggtcgcc 60
ctcatacttc ctgctactg ccttcgtttc tctttccaac aatcaagatg agccgtggcg 120
gtagcgcggg tggtggtcaa agttctctgg gttacctctt tggaagcggg gagccccca 180
aaccagcagt ggcaccagct gtaagtgtc cacctgctgc tgcaggtgct ccacctgctg 240
agaaaccacc tgctgcaaag cctgatggca ccagtcagat tgctgctggg gttaccagcc 300
aaaccaataa ctaccacagg gccgacggtc agaacaccgg aaacttcctt acggaccgtc 360
cttctcgaca gagtcaacgc tgctcct 387

<210> 5567
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-C9

<400> 5567

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ctccggcggg cgggccatgc acgcgtccag ctagctcaca cagcgccgtc tcgaccggct 120
gccggtgctc caccggccc gcgtccacat cacggcgggc gggcgcgcg gtgaacggtt 180
tctctccgc atgaccctgt gatggtcggt gggttcctgc ggcgcgcca cagcctcgac 240
aggctcctgt cgaggaggcg ccgggcccgt tcgcccagcc cctcgttctc gtccctctcc 300

tccacgccgt cgtctccgcg tggcagcagc gtcaggagcg gcatgatggc agaggacgac 360
gacgacgcgc ccaccaccgt ggcgggcgcca ccgc 394

<210> 5568
<211> 381
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D12

<400> 5568

cggttcgacc cagcgtctta aaataaatag gcacacaaga acaaatacct cgctaccaac 60
aatggcctcc aggtcctcca tcctacttgc aacgtcaatg ctggctgcgc tgtttgcggt 120
tggtttgtgc acaaccccg ctcaccttcaa ggttggcaag ggatccaagc ctggccacct 180
gaccttcacc cccaatgttg caaccatata cgacgtggaa atcaaagagc acggggggcga 240
tgactttctc tttaacgtca aggagggccc gaccggcacc tggacgctcg acaccaaggc 300
cccgtcaag tcccccttt gcatccgctt tgctgtcaag tccggtggct accgcatcgc 360
tgacgacgtc atccccgctg a 381

<210> 5569
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D2

<400> 5569

gggtcgaccc acgcgtccgc aacaacgaaa tcgctatgga cgggggcata tcccctggcc 60
tcattcgctt cttcttccac gactgcttca tcacgggttg cgacgcttcc attctcctgg 120
acgagtcgcc cgccggcgac gtcccagaga aggagtcgtc cgccaacggc ttcaccctgg 180
tcgggctcag aaccatcgac atcgccaagt ccaccgtaga gggcatgtgc cccggcaagg 240
tctcgtgcgc agacatcctg gccttcgcgg cgcgcgacgc cgccgtggcc gcgggcctcc 300
cgagatacga ggtcgcggcg gggcgccgcg acggcatgcg ctcgaacatg gacgacctcc 360
cggggcaact tccccgtgcc gggccaccac gtgccgcgcc tcaccgagct cttcagccag 420
cgggggctct cc 432

<210> 5570
<211> 399
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D3

<400> 5570

cgggtcgacc cacgcgtccg aaaaccctgc gtgtacgtgt caaccgaccc ctccccctgc 60
gagcctgcga cgagtctcct gccgctcttc ccggccgggc gaaatggacg gtgtcgttgt 120
caggaggggtc atcccttcgg ataacagttg cctcttcaac gctgtgggct acgtgatgga 180
gcacaaccga aataaggctt ctgagctcag acaggtcata gcagcaacag tcgctgggtga 240
tcctgagaaa ttcaatgaag tgtttcttgg caaaccaaatt gaagcgtatt gtgcttggtat 300
tttggatcct gaaaagtggg gaggagccat tgagctctct attctatccg aatactacgg 360
gcgtgaaatc gcagcatatg acattcagac cactcgtctg 399

<210> 5571
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D4

<400> 5571

acaggtccga gactcgcggg tcgaccacg cctccagcga tagtcggagc atgggcactg 60
ctcatcgtec tcgcggctgc cgtcgcggtc ctggccgcgc ggccggcgtc tgcaggcggg 120
ggagccgcgg cgggtggcga gatctgcatg aagactccgt ccccgacct gtgcaccagg 180
acggcgggga agcacgcaa caagtacaag gtgggtggacg cggtgacggt gctagagatg 240
caggtggacg cgttcaagaa gcgcgtgaag gcggcgcgga ggctcgcaa ggaggaggtc 300
aagacggccg cgacgcccga ggcgcggagg gcgctgaacc tctgcaagac ctactacctg 360
gacgccgccg acaacctcgg cgctgcaag cgcgccatcg gcttcgcga cgccgtcacc 420
atccgcgcc 429

<210> 5572
<211> 405
<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D5

<400> 5572

ctcgcggggtc gaccacgcg tccgcacacg cttccgcca cgcgtccgcc cacgcgtccg 60
ataaacatca tggggcaagc ctcacggctc gtcctcctcg ccgtcgtggc gctgctgtcc 120
gccggcctcc tcccgagggc gctgggtaag ggtaggggat gcaggggaca cgtggcgccc 180
gtcaaccgcg aggtcgccgg catctgtctc cgcaccccg tcccgagggt gtgcacgtcc 240
accgccgggc ggcacgcgtc gaagtaccgc gtcacgaca acctggccgt gctgaacatg 300
caggtggacg cgttcgcca ggcacgcgcg caggcgcgca agcacgtcgc gacgtcgccc 360
cgcaccatcc cgcgcagca gacgcatgcg ctcacgttct gcgac 405

<210> 5573

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D6

<400> 5573

cgggtcgacc cacgcgtccg ggctagtctg tggatggcgg cgcacgacc tctcctattg 60
ccgtgctgg tcgccatgct agcggtggtc gccgatgtcg ccaacgccgg ccacgccaag 120
cccctgacgc ctggcggggc cgtggtacac gacaaccacg gcaagttcac ggccggggccg 180
tggaaacctg cccacgcgac cttctacggc gggcgggacg ggtccggcac cacggcgggc 240
gcgtgcgggt acaaggacac gcgcgagcag gggtacggcg tgcagacggt ggctgtgagc 300
acggtgttgt ttggcgatgg cgcggcctgc ggcggtgct acgaagtgcg gtgcgtggac 360
agccccagcg ggtgcaagcc cgacgcggcg gcgtggtgg tgacggcgaa acgactgtgc 420
ccgccca 427

<210> 5574

<211> 281

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D7

<400> 5574

ccacgcgtcc gccacgcgt ccgacaacaa acaatgccat gatgaaatac atagtagagg 60

agacctcttg tcagtcaccc atacgagcat tgattttcac tgatgccct gtatatttcg 120

tatcacttat tatgtagatg tacatgtgat ggattttgca ttgtggaact gttaaaatga 180

accgacatga gatgccaaat ctttgcacca aacagtatga tgtattgctg atctgatttt 240

tttgcacaa atgtatatct aatataccat attttttgct t 281

<210> 5575

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D8

<400> 5575

cgggtcgacc cagcgcgccg ggctaattcg tggaaggcgg gccacgacc tctcctgttg 60

tcgctgctgg tcgccatgct agcggtgcc gccgatgctg ccaacgccgg ccacgccaag 120

cccctgacgc ctggcgggcg cgtggtacac gacaaccacg gcaagttcac ggccgggccc 180

tggaaccag ccacgcgac cttctacggc gggcgggacg ggtccggcac cacggcgggc 240

gcgtgccccg acaaggacac gcgcgcgac ggggtacggc tgcagacggt ggccgtgagc 300

acggtgttgt ttggcgacgg cgcggcctgc ggcgggtgct acgaagtgcg gtgcgtggac 360

agccccagcg gggtgcaagc ccgaccggc ggcgctggtg gtgacggcga aacgactgtg 420

ccca 424

<210> 5576

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-D9

<400> 5576

gggtcgacc acgcgtccgc tcagccatcc ccatttcat cgacatgaag tactgcccc 60

acaagttgtg tactgccaac ggcgcctcca aggtcacctg caaggatgtc accttcaaga 120

acatcaccgg cacctcctcc accccggagg ccgttagcct gctctgcaact gccaaaggct 180

catgcaccgg cgtcaccatg gatgacgtca acgtcgagta tagcggcacc aacaacaaga 240
ccatggctat atgcacgaac gccaaagggc gcaccaaggg ttgcctcaag gagcttgcat 300
gcttctagac cctccatcga ctgacccatc tctctagtta taatttttct ctgcgccttg 360
cattgcccac tagatgctat ccattggtaa cgcacaacag taaaacgaca gacat 415

<210> 5577
<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-E1

<400> 5577

gggtcgaccc acgcgtccgt acagccgcgg gctgggtgcag cggatgccgc gctgccgcta 60
cggcttcttc cagtggtga acaacgacta cagcactgg atcatgtacg ccatcggcgg 120
caacatgaac cccaccatca tcagccaggg caaccgcttc atcgcccccg acgacgcaa 180
cgccaaggag gtgaccaagc gggagtacac gccgtacaag gactacaagg agtgggtgtg 240
gaagtcgcag ggcgacgtca tgatgaacgg cgccttcttc aacgagtccg gcggccagaa 300
cgagcgcaag tacgacaggt tcgacttcat cccggacaag cagggccgct acgtcggta 360
gctcacgcgc gtcgccggag cactcaagtg catcgctggc taccgtgcta gtagacagc 419

<210> 5578
<211> 374
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-E10

<400> 5578

cgggtcgacc cagcgtccg atccacctcg ctcatgtccg ctcaccgggg cgggctcagc 60
atcctttcga agaagtaaca cttctccgtg aggcctgagc ccctcgccgc ggtgagccaa 120
gccggcgcac gtcgccccgg ggctcacgt caccaccgag cccaaccaa ttaataatat 180
atatatatag ctaggatcga tcgtcagtaa aatggcaggc tccgccgtcc tgaggagccc 240
cctgtccgtc ctctctaca tcctcgccgc cgtgcccgcc accgccgcgg cgacgccgac 300
cgacgccgcc atcgacgagg cgtacgcga tctcgtcaac ctcaccgcta accaggagta 360

ctgggcggag cgcg

374

<210> 5579
<211> 213
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-E11

<400> 5579

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tgtgattgca ggctcacgct tcaccggtct gactgcactc tcagagatag tacagtggcc 120
tttgtcagca cctgtgaaga tgtcaatcgt ctctgaatga tcaggacggt cctactcgcc 180
tagaacaggt acttgacta cgtgacgctc acc 213

<210> 5580
<211> 395
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-E2

<400> 5580

ccacgcgtcc gaagcaagcc atcgaaggct ggagcctggg cactgctcat cgtcctcgcg 60
gctgccgtcg cggctctggc cgcgcggccg gcgtctgcag gcgggggagc cgcggcggtg 120
gcggagatct gcatgaagac tccgtcccc gacctgtgca ccaggacggc ggggaagcac 180
gccaacaagt acaaggtggt ggacgcggtg acggtgctag agatgcaggt ggacgcgttc 240
aagaagcgcg tgaaggcggc gcggaggctc gccaaggagg aggtcaagac ggccgcgacg 300
cccgaggcgc ggagggcgct gaacctctgc aagacctact acctggacgc cgccgacaac 360
ctcggcgccct gcaagcgcg catcggttc cgcca 395

<210> 5581
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-E3

<400> 5581

gggtcgaccc acgcgtctgc acgctcacgt cagatcaccc gggcgggctc agcatccttt 60
 caaaaaatta acatttctcc gtgaggcctg acccctcgc cgcggtgagc caaccggcg 120
 cacttcgccc cggggtcac gctcacaacc gacccccaac caattaataa tatatatata 180
 tagctaggat cgatcgctcag taaaatggca ggctccgccc tcctgaggag cccctgtcc 240
 gtctcctct acatcctcgc cgccgtgccc gccaccgccc cggcgacgcc gaccgacgcc 300
 gccatcgacg aggcgtacgc gcatctcgtc aacctcaccc ctaaccagga gtactgggcg 360
 gagcgcgcgg aggcggcgca cgctacaac cgcgggcggt tacagaccga cc 412

<210> 5582
 <211> 407
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-041-Q1-E1-E7
 <400> 5582

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 aataaggtcc cgcccttttc cgacattcac aggggggaca ggaaatcagc ggccatggcc 120
 tcgattccgg cgacgacctt cgccgtcatc ttatccgtcc tcttctgtgc cgcggtggc 180
 accgccgtcg acaacgacct ccccgactac gtcattccagg gccgcgtcta ttgcgacacc 240
 tgccgcgcgg ggttcgtgac caatgtcacc gagtacatcg cgggcgcaa ggtgaggctg 300
 gagtgaagc acttcggcac cggcaagctc gagcgctcca tcgacggggt gaccgacggg 360
 aacggcacgt acacgatcga gctcaaggac agccacgagg aagacat 407

<210> 5583
 <211> 416
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-041-Q1-E1-E8
 <400> 5583

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 ttgcccgtcg atcagttggt ggctgccggc cgggtactac cgctgcacg agcagcggct 120
 agccacagcc cacagacaga cgacgtcagg tcttggcagg tgtgcaagca gacagagctc 180

gctcggtcgc catgtctttc accggcacgc aggacaagtg caaagcctgc gacaagacgg 240
 tccacttcat cgacctgctc accgccgacg gcatctcgta ccacaagacc tgcttcaaat 300
 gcagccactg caagggcgctc ctctcgatta gcagctactc ttccatggac ggcgttctgt 360
 actgcaagac gcacttcgaa cagctcttca aggagacagg gaacttctcc aagaaa 416

<210> 5584
 <211> 411
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-041-Q1-E1-E9

<400> 5584

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 tgaacactca cagttcggga gcagcaattc cctaccagag ttgggacctg atgccacaca 120
 agatctagcc ttctaccaa gaagcaactc cgaacagcaa tggagctggc ctgggtctgt 180
 tgcaacggag gattccgatg atttcgaggt tgcaactaat tgctcgtag agctggactg 240
 cgtgaggcca tctagtgcc caaaagcttc aggtttatca aatggagggg gcacagctgt 300
 aaaaaagatc caagtcaagg gttcaaaagg ttcagacgtt aggggagtga atcctggaaa 360
 aaggtcacg ccattacaga agaagccgag tggaccctca ncgacgctaa t 411

<210> 5585
 <211> 94
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-F11

<400> 5585

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 cccaaattga gccacggag tcgacttttt aggc 94

<210> 5586
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-F4

<400> 5586

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cctcctcggc gcatgcccg agtactgctg tctcgtgtac gactacatgg accacggcag 180
cctcgaggac cggctgttcc gtcggggcgg cacgcgcgcg ctgcgtggg cccagcggtt 240
ccggatcgcg gcggagatcg cgacggcgct gctgttcctg caccaaaca agccggagcc 300
gctggtgcac cgggacctga agccggccaa catcctgctg gaccgcaact acgtgagcaa 360
gatcagcgac gtcgggctgg cacgcctggg gccgcgt 398

<210> 5587

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-F5

<400> 5587

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gtcgcgtgc tagcgggtggc cgcggatgct gccaacgcg gccacgcaa gccctgacg 120
cctggcgggc gcgtggtaca ccacaaccac ggcaagttca cggccgggccc gtggaaaccc 180
gccacgcga cttctacgg cgggcgggac gggtcggca ccacggcggg cgcgtgcggg 240
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ttcggcgacg gcgcggcctg cggcgggtgc tacgatgtgc gctgcgtgga cagccccagc 360
gggtgcaagc ccacgcggc ggcgtggtg gtg 393

<210> 5588

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-F6

<400> 5588

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tgatgggatt tgccaatgat gctttcgtag gatgcgcacg tggaagcaag caggtgaagg 120

gtttcatggt tgaaaaaccc gttgatctga aagtaggtgt gaaccatggt gtattgctgt 180
cgtcaactat gggaatgaag gacagtgggt gtgaacttgc tgaagtaaag agtggcattc 240
aggagtgcct aatccagggg ctgaacactg ggacgttgga ttacaagtc aatggctggg 300
gccataaggc tgcactggaa ggtgaggaca aggagatcta ctcagaaaaa ggtgtgggca 360
aagttcagtg gaaacctgcc gagaacggcc gggcagccac ttggtataag agatacttcg 420
atgagccaga tg 432

<210> 5589

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-F8

<400> 5589

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gctcatgata gagccgcacg accgagggat cacgtgagtc gcacacacca ccatgcaagc 120
cacgcgtcag gccacggagg gggacgcaca tgagcacgcg gtgagggctg aggctgacga 180
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cgtggcgggt gttaggggagg acgcggatgc cgatgcggac acggagacag agactgaccg 300
cgaggcggag gcataggtcg aggccgaggt ggaggtcgag gtggaggcgg aggccggtgc 360
atcgtctgcg aagaagaagc gtatccaggt gtccagcaac a 401

<210> 5590

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-F9

<400> 5590

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gagtccttag gacgcggcac gcacccttct cgcgggcgcg ggcgcgggcg cggggcgcgg 120
gagcaggcat ggcgtcgag gtcgtgggt caaccccgcc ggtggcggcg cttgggttcc 180
ttctcccgac cttctgggag atcgaggtca cgtgcgccgc cgcgatgata ctcgtggcgc 240

tttacgttgc ctacgagctc ctcaaccgcg gtcctctgca ggccggcagcg gcggggcgacg 300
 ccgacgagct cctcgtgcgg gggctggacg gcgccgacaa gttcaagggg ggtgtgagcg 360
 gcccctctgc ctatgtagtg aagctcgaat tgttggctgc aaaaaatttg atggcggcga 420
 acttaaattgg gacat 435

<210> 5591
 <211> 363
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-041-Q1-E1-G1
 <400> 5591

gggtcgaccc acgcgtctgc acaactttga accagaaagg gatgatatcg caaatgatat 60
 catcaattgg ttgagcgcaa gacttagtgt tcttcagaga tggtagctg aatcaagtat 120
 gaactacaag gtgcttcccc ttatgtagtt accggcgggtt ttactggaac tgtatacatg 180
 gcatagagtg cagaatagtg taaatgtaaa ctaggatgtt atcattatgt cttcacggtc 240
 acggtcattt cttgtcttca gctctgctgt ataagtttgg gaagagccta catgagatgt 300
 aaataatatt agagttaagc tgaaaataat gtatctccta atacaaagggt agttcagtgt 360
 caa 363

<210> 5592
 <211> 383
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-041-Q1-E1-G10
 <400> 5592

gggtcgaccc acgcgtccga ggaagcgtgg gcangagccg gggagatgtg gagaccccg 60
 gacaaggcaa aaaaaaggag cggcgtgca tcaagcaggc tcctcgaccc ggcgttcaag 120
 cctccaaac tatcccagga ccggtcgcac aagttaaagg aattacacaa gaaacggtta 180
 cagataactg aaaagccgaa gtataaaaga aaactgaaag gaaccgctgg gagaagtacc 240
 aaagtaacca gtgattacaa attcactaat acggatgcat ctgctgatag ttctccaaga 300

gatgtacatc atacgtcatc aattacagga atccaagggg atcctgcatc angcctgtcc 360
tcgangaaca aaagaaagct aca 383

<210> 5593
<211> 315
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-041-Q1-E1-G3

<400> 5593

cgcaaggctg agtagccggg tcgaccacg cgccgccc cgcgtccgca cacgccttct 60
tccgcgtagt gcttggtgat cactttggcg gcgatgtttg gtggtgctat gtagcggttg 120
ccctcaagta ctgtgttggt gcattgttac acatcacagt acagtttggt caaatttttt 180
ttccacagag gaagtangga ttgatttaat cattgattta atcccacacg cgtgtatcta 240
cgtatacagt ttgtataaca tgaaccacct ctgtttgcga ttggtctaaa aataaatata 300
atacttatat attga 315

<210> 5594
<211> 396
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-041-Q1-E1-G4

<400> 5594

gggtcgaccc acgcgtccgc catgctcaac aacagccagc tcgcgaaaat aatgaagagc 60
cgcagcatgg catcatcggc cgcgctcttg gtgctagccc tcgcgctagt ggcggccacc 120
gccccacagg tagcggaggc aaagaagaag agagcggcgg agagcggcga ggcggcggag 180
gcgaagaaga tccaggacga cttctgctcg acgctgtgcg agggcaagaa ggggacggac 240
ctggtcgtgt gcaaggagtc ctgcgcgtc tcccagcagt ccaacctggt gctgtacggc 300
aggatccagt gcaagggcaa gtgcaccgag cagaagggca tcacggcgcc ggccatgaag 360
gtctgccagg aggagtgcga caaggcgtac gtggtg 396

<210> 5595
<211> 344

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-048-Q1-E1-B11

 <400> 5595

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 cggggggtcc cgcttcccc tgagggcggc gcgcgcccg agattgaccg cgggtgctggc 120
 ggttgcgcca gtcagaggaa tgtcccatcg tcatctggat ctagtaggag tgtcgtgcgc 180
 tccgagagca ggcattggtca tgatctcgca ccgggttcat tcggttctcc gtctcgggtca 240
 cccggggaca aatgacgtca ctggctggca agaggtgcgt tctgctgctg atcgagtcga 300
 ccgtctcgac gatatcagat cacacaacgg tgcaccaggc ttgt 344

<210> 5596
 <211> 212
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-048-Q1-E1-B2

 <400> 5596

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 cctcaggcaa gccgaccgcc gacgtcagat cgcgccaacc cgagagaacg acggagatga 120
 tcaagaggat gcacatcgcc gcgctcctcg tagtcgccgt ctgggccgcc gcagtgccgg 180
 ccgccaatga ggccacagcg accggagcga cg 212

<210> 5597
 <211> 338
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-048-Q1-E1-B3

 <400> 5597

 acaacaccct atagtgagtc gtattactga cagcgaacaa tgatgccaca actgcgtagc 60
 ctgctcgcgc tggtcacgtg ggccacggcc ataaccgccg cgggcggcgt cgcgttaggc 120
 ttcaccctta gcatcgctg caagcaactg tcacaccggg ttagagagac acctatctca 180
 agctaacggg cgctcgattg tgaacatcga gtgcgggaaa ttccagtcgt aacagtccat 240

aatcacgttg aagcaaatac cggtttcggc agctggtata agatcgaaat ggcccgcac 300
catcaccatt acatccgcga cctcagcctg aacaggaa 338

<210> 5598
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-B8

<400> 5598

acacgcgtct gaggaagaca tccgcaacgg gaacgtcgtc cgcaacgtcc gcccgcggcg 60
cacgggaaac tgcctcgccg acgaaagcca catcatctgg gacaaaggcc acgtcctgca 120
agacctctc ctcaagggtcc ggaacgtcca ctccggcgctc gtccaactgc aactcagatg 180
ggtcgccacc ccacctgaag cagactgaac tggaggagac gaactgcagt atgtacgtgc 240
tctcgctcca tatccccatg ggaagaacgt acggattcgc tcgcgtgacg atgatactat 300
gcgatgcatg catgctcaag agtcaagatg tcaactgtctt ctgtgtattt tagtacagcc 360
acgtacattg tcgccatcca tcatcactat gcatggactt tttttt 406

<210> 5599
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-C1

<400> 5599

gggtcgaccc acgcgtccaa agaactttca aggtggagca tcttcaaaca agaacgacca 60
ggcaaaggct ccaagcaagc tatcatctgc attctctgga actcaagata aatgcgcggc 120
ctgccagaaa acagtgtatc cattggagaa gatgactctg gaaggcgaat cctaccacaa 180
gagctgcttc aaatgctcgc acgggggctg catcctcacc acgtcctcct acgccgcgct 240
caacgggggtc ctctactgca agatccattt ctgcgagctg ttcaaggaga agggcagcta 300
caaccacctc atcgagacgg cgcagaccaa gaagaacgag gccgcggagg ccggaccgga 360
gccaccggcg gacgcaggcg ctgctgagcc ggaagcaccg gcgcaat 407

<210> 5600
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-C11

<400> 5600

tcccgggtcg acccacgcgt ctagggaaac accttgaaga cgggcgcacg cttgccgact 60
acaacatcca gaaggagagc accctccact tgggtgctgcg cctcagggga ggcattgcaga 120
tcttcgtgaa gacctgacc ggcaagacta tcacccttga ggtggagtct tcagacacca 180
tcgacaacgt caaggccaag atccaggaca aggagggcat cccaccggac cagcagcgtt 240
tgatcttcgc tggcaagcag ctggaggatg gccgcaccct tgcggattac aacatccaga 300
aggagagcac cctccacctg gtgctccgtc tcaggggtgg catgcagatc tttgtgaaga 360
cactcactgg caagacaatc acccttgagg tggagtcttc ggataccatt gacaatg 417

<210> 5601
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-C12

<400> 5601

gggtcgaccc acgcgtctac acacgcgcct ggcagaggcg cagagacagg cgtcttcgta 60
ctcgcctatc tccgcgactc aaagcttctt ccatttcta ccgccgccgc tgcagctcca 120
ccccattccg tcgacaccat gagggagtgc atctcgatcc acatcggcca agccggtatc 180
caggtcggaa acgcgtgctg ggagctctac tgccctgagc atggcattca ggctgatggc 240
cagatgcccg gtgacaagac cattgggggt ggtgatgatg ctttcaacac cttcttcagt 300
gagactggtg ctgggaagca cgtccctcgt gctgtttttg ttgacctga accaactgtc 360
atcgatgagg tgaggactgg cacctaccgc cagctctttc accctgagca gcttatc 417

<210> 5602
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-C4

<400> 5602

ccgggtcgac ccacgcgtcc acttttcac acatgatatt agaagtgtaa tctatggaga 60
acaaccaaga aataggttgg atttgtacat acccaaagat aatagcaaat caagtccagt 120
tgtggcattc gtaactggtg gagcttggat cattggttac aaggcttggg gtgctctcct 180
tggaaggcgg ttagcagaga gaggaattat agtagcttgt attgattaca gaaatttccc 240
tcaaggaaca ataagcgaca tggtcagtga tgcttctgag gcgatatcat tcatttgtaa 300
caatgttggt agctttggag gggatcctaa taaaatctac ttgatgggcc aatcagcagg 360
agcacatatt gcggcctgag ctctcttaga gcaagcaatt aaggaatcta agggagagaa 420
tacctattgg aatg 434

<210> 5603

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-C5

<400> 5603

atagtgagtc gtattacggt aggtgcattg cttcggtggt ccaccatggc gcatcgagcg 60
gtggccacga tgacgactaa taagcccctc ctctctctcg ccttggcgtc cgcgctcctt 120
ggtgcggcgc cggccgcgcg gaacgcgccc ggcgggggcgt tcagcaactg ggtggcgatg 180
aaccagcata gctacgcgct gtacgcgcag aactccgtcg gggactgggg caaggagccc 240
ctggacaaca agctgtctga ggcggaaaag aagaaggta cctacgtggt ggaccctagc 300
ggcaagggcg actacacgat catcagcgcg gcgctggagg atatcccgtg gagcagcagc 360
aagcgcgtga atctggatct c 381

<210> 5604

<211> 226

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-C7

<400> 5604

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cgacgacgag gccgccaacc agttcttgaa gcgcacgttc cagctggcca ggaggcggtg 120
 aggccacggc catagcttga cttgaaggag cacgaaagat ccttacgctg cccgcgcccc 180
 gcggcccgat tgatgaaatg atgtgctggg tgtttcgcat ttttct 226

<210> 5605
 <211> 364
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-C8

<400> 5605

atagtgagtc gtattaatcg tcggagcaca cagagacttc ctgcctcca tcgcatcacg 60
 ccgacgacgt cgctacggtc gctaacaagc cgccgcatcc agggatggag atgaagaaga 120
 tcggctgcgc cgtcctcgtc gccgcctcgg ccaccgtggc tctggacgcg gaggtgccgg 180
 ctcagtccca cagcagcggc tccgcggctg tcgcatccga catcgtcggg gccgccgtgg 240
 tctccgtcgt cgggtacaac agatactgac tcgccggacc atgagtcgga ctgccggacg 300
 gaacaaacca atgggggggag agacttggat gcgctgtcct gctctgccgc cctggcgag 360
 tccc 364

<210> 5606
 <211> 437
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-D11

<400> 5606

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 cctccccgag gccagcagca tggccaacgt cggggagatg atctgcaacg tcgaccgcga 120
 cagcgacggc cgcgtcgact tcaacgagtt caagtgcatt atgcagggga tcaccgtctg 180
 gggcgccctga ctgacctcat cgtcgtaccg cgtacgttct gacttctgag tgtgtggcaa 240
 ctggcatgat ggtccccgca tttcgtcgag acagtcctgc gtctgcgtct ctaattgaat 300
 tctttagtat cgtccttcac atcactggtc tagtggtgat gagaatgcc tgtcctgtgt 360
 gtgtgtgtca cataaccatg gtatgtaatg tcatactggg aattaggtat atgatgatga 420

cagctgataa gaaaatg

437

<210> 5607

<211> 433

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-048-Q1-E1-D4

<400> 5607

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ccaaggacac ggccacgatg gaggcgatcg ggaacggggt cctgatgcgc gggatcggcg 120
tgaagaacac ggcgggagcc aagaaccacc aggcggtggc gctgcgggtg cagagcgaca 180
tgtcggcggt ctacgagtgc cggttcgacg ggtaccagga cacgctgtac acgcacacga 240
gccgccagta ctaccgcgac tgcgtcatca cgggcacccat cgacttcac ttcggcaacg 300
cgcagggtgt gttccagaac tgcctcatcc aggtgcgcaa gtgcatggac aaccagcaga 360
acatcgtcac ggcgccagggc cgcaaggaga ggcngtcggt gggcggcacc gtcattcaca 420
actgcaccgt cgc 433

<210> 5608

<211> 392

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-D6

<400> 5608

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cgtccttttt ctcgattttg atgagaagca tgttggcagg aaaaaaacat cggcccttgc 120
cttgtttgtg catgcgatcg agatccatgc atgcatatga gagagacttg catgatggac 180
gatcttacag gagaccgagt atggagccct tgatgatgcc gttgacgctt gagatggtgg 240
cgactcagca ttcttgact cgccagttct tgcgtccgga cggcagtacc ggggatacac 300
gcctatttct actctcaatg gagcatctac ttctctctgt attgttattg ttttgcgagc 360
agaattgctg atatcgtgtt gtaacacagt gg 392

<210> 5609
<211> 389
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-D7

<400> 5609

tcgctgtcca ttacaacacc ctatagtgag tcgtattaca cagataataa ggaaaggtcc 60
cgcccttttc ctccgacatc cacagggggg aggggaaaac acgtgcattc acccggcggc 120
aataatggcc tcggttcggg ctccggcgac gacgaccgcc gccgtaatcc tatgcctatg 180
cgtcgtcctc tcctgtgccg cggctgacga cccaacctc cccgactacg tcatccaggg 240
ccgcatgtac tgcgacacct gccgcgccgg gtctgtgacc aacgtcacgg agtacatctc 300
ggcgcaaca gtcaggctgg agtgcacgca ctccggcacc ggcaacctcg agcgcgccat 360
cgacagggtc accgaatcga tcagcacct 389

<210> 5610
<211> 82
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-D8

<400> 5610

cctatagtga gtcgtattat acaagtcgag tcagtagggg gcgtcctttt cagggtgggct 60
ccacatcggc gatcggtaac gg 82

<210> 5611
<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-D9

<400> 5611

gggtcgacac acgctgtctac aattacttat accagttcct accatgcact ttattctgct 60
ttccggttct caacgtcttg gacatcgccg gcgagcacag tctcctcggc aacttcttct 120
actgctaact cgggtgcaag gcaaggaaac tcggtatcgt cagagatatc ttgatctaata 180

ggtaaaccat gaagtgagggc atatcttcaa gacacgatct aaagttgtct cgtttatccg 240
 gaagtttctt gatgaccgtg aatttttggg ggtggagact ccgatgatga acatgattgc 300
 tgggtggagca gctgcaagggc cttttattac acatcacaat gaattaaata tgaggctttt 360
 tatgcacatt gctcctgaat tataatctgaa ggaattgggt gttgggtggat tggaccgtg 419

<210> 5612
 <211> 377
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-E10

<400> 5612

taatctgac ggggtggcgc ggacccgtcc gccagtgtag tgttcactag taaacacggg 60
 acagcatgca tacaccagga cttgctgggtg taaataaatg ttaagataaa agtatatata 120
 actcccatta caatgattgt tttttaaac ccattacagt gatttgagag ggcattctca 180
 gattacatca atagatatat ccgtgcgttc tcatttgggt cccccccacc caacgtccct 240
 tctcccttcc ctaagcttcc ttcgtctttg ttctttttga tgattttatt tcgccgagca 300
 gcacaggaat ggattagtta gactggatgg tcagaacacg atgtgaaaac ggcgcccttcg 360
 tcgtcttttag cgcgcg 377

<210> 5613
 <211> 440
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-E12

<400> 5613

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 agggccccca gccctagcgc cgccactctc tctcctcta tttccccct cgccgtcggc 120
 agaggagact gccgaaggcc ggcgcgacct ccaaagatgg cggctacggg gcgtttctcc 180
 ggcatttctc cttcgtttgg tcttccgatg ctcatatctg agcgggttct gtgccggggc 240
 gttcaagttc cagccgcggg gttgctgggg cgggcgtcgt cccccacgc gtcgtcttcc 300
 ttgtccccgg cgtcgtcggg gggctgtgct cgggtggttca acatctggtc ctgcaggtgc 360

atccaggtga tggattggcg gcatctactg gtggtggcgg ggctgcgccg tttcggcggc 420
 ggacacatgg cgtggtgggc 440

<210> 5614
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-E4

<400> 5614

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 acttcacga cctcctcacg gccgacggcg tcacctacca taagacatgc ttcaagtgca 120
 gccactgcaa agggatcctc tcgatgtgca gctactcttc catggacggg gtgctgtact 180
 gcaagaccca cttcgagcag ctcttcaagg agaccgggag cttctccaag aacttcacgc 240
 caggtggcaa gtcttcagac aagggtgaac tgacaagggc cccagcaag ctatcatctg 300
 cgttttctgg tactcaggat aagtgtgcag cttgccagaa aacagtgtac ccgctggaga 360
 agttaactct ggaaggcgag tcctaccaca agagctgctt caagtgtctg cacgggggct 420
 gcatcct 427

<210> 5615
 <211> 180
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-E5

<400> 5615

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 tatgccaaag agagcaagca gtcttcaacg gtgcatatca gatcggaggg atggtacgga 120
 gtacgggtta cacggagctt cgtcagcttc ttgataagca ccaggcggaa gtgtctggcc 180

<210> 5616
 <211> 378
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-E6

<400> 5616

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gcacaaaccc caacggcgagg ttcctgtcgt acgggaacat ggagagctat gcgatgtggg 120

tggcgaccgg cgtggcggtcg gccttcttcg cgtccctcga gcgctgctcc tgcacccacc 180

tccacaccgc ggaggacgac tgcgacgagg atgaggacga cctcgaggag gcccgccgct 240

ccttctcccg cccgatccct gactactact acgaccggtc cggctcctcc gcctccgctg 300

ccacgatgtg acctgaccga accgcgcctc cctccgcca tgaaatgcgt ggtgatacta 360

tccgtttctt gatcgatt 378

<210> 5617

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-E7

<400> 5617

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cgcgccctgg agcgcgccga gctgcaggac atgctggacc ccgccgtgcc cgactggccc 120

ctggaggacg cgcagtgcct cgccgagatg gcgctccggt gctgagagct gcgcccgaag 180

gaccggcccg acctcggcgc cgtcgtgctc ccggagctca accggctgca cgcgctcggc 240

gaggacaaca tgcagtactg cggcgccatc agcaggggtg gcggcagcgg cggcgccatg 300

cacagctcgt cgccgttcca cagcaacatc tcacggtcac acgcccagat gatgatccat 360

tctcagtacc caagatcagt gttcagctca agagcgggga attcgcccag 410

<210> 5618

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-F12

<400> 5618

ttttcattac aacaccctat agtgagtcgt attagaatat acagttcgtg aatccctgaa 60

gcgtgcatat atatattcct gccaaagataa aggtaatgga atcgtcacgc aggttccagc 120

cggccgcat cctgcttctc ctgctcattg tgtccaccga tatggcatat gcaagggaat 180
 gcgagaagta cagtgagcga tttgttgggg catgcatgat cgcagacaac tgcgccaatg 240
 tgtgccgcgg tgagggcttc ttggccggca ggtgcagcac cttccgccgc cgctgcatct 300
 gcactaggca ctgctaaaca agatcgctcg atcgcttgcc atgcatcgac aacctattct 360
 taataacgtt cattatctcg ttcttattta tgacgaatgt catgtatggt ctggtgactg 420
 tcatgtatat tctga 435

<210> 5619
 <211> 439
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-048-Q1-E1-F5

<400> 5619
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 acgtcggtga cgaggcgcag tccaagaggg gtatcctgac cctcaagtac cccatcgagc 120
 acgggatcgt cagcaactgg gacgacatgg agaagatctg gcatcacacc ttctacaacg 180
 agctccgcgt ggctcccgag gagcaccg tctctctcac cgaggcgccc ctgaacccca 240
 aggctaacag ggagaagatg acccagatca tgttcgagac cttcaacacc cccgctatgt 300
 acgtcgccat ccaggccgtg ctctctctgt atgccagtgg ccgtaccaca ggtatcgtgc 360
 tcgactcggg agatggtgtg agccacaccg tcnccatcta cgaaggatac gccctcnccc 420
 acgccatcct tcgccttga 439

<210> 5620
 <211> 400
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-048-Q1-E1-F6

<400> 5620
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 aagaggggta gcctgaccct caagtacccc atcgagcacg ggatcgtcag caactgggac 120

gacatggaga agatctggca tcacaccttc tacaacgagc tccgctggc tcccaggag 180
 caccctgcc tctcaccga ggcgcccctg aacccaagg ctaacaggga gaagatgacc 240
 cagatcatgt tcgagacctt caacaccccc gctatgtacg tcgccatcca ggccgtgctc 300
 tctctgtatg ccagtggccg taccacaggt atcgtgctcg actcgggaga tgggtgtgagc 360
 cacaccgtcc ccattctacga gggatacgcc ctccccagg 400

<210> 5621
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-F7

<400> 5621

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 tggcttggta gaaggaactg agcgtctgag ccaactaaga cagacagctg aacggatggg 120
 ccagctatcc actcagccat atgggtcaaaa tcgaccaact cttgatgcat taatctgact 180
 gccacacatt ttttaciaag ttgttttgcc ttcacgtacc cttegcaata acaccatgtg 240
 ttgtcactgg tttcttctgt aaccttaaca ttgggtttta aggctcaaac ccaacgaaac 300
 atgagaactt ggtggtctat ggtttcgtct gtaaccttat cgttgggttt taagggtcaa 360
 acccagccga aacatgagaa cttggtggtt ttaacgataa atcaccaaac ctctacagg 419

<210> 5622
 <211> 417
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-G1

<400> 5622

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 ccgcaaccgc cacatcagcc atgggcgcct gcgcaaccaa gcccaagacg cttgaggggc 120
 aggccccagc tgaggccgcc gtctccacac ccaagggtgc gcccgaggcc actccaatct 180
 ccgttgaggt tgcggctgat gaacaggtag ctgagaaggt ggtggtggag gagccggctg 240
 cggcgccga cgttgagcat cagaaggcta atgaggtggt cgctccagag gcggccgtcg 300

ccgagcccga tcacaaggag gaggaagccg tggagaagac cgtcgtcgag gaggagaagc 360
cagcggcagc cgccaatgca gagggaaaagg tcgccaccgc cgccgagacc acgacga 417

<210> 5623
<211> 421
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-G10

<400> 5623

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cccgcccttt tccgacattc acagggggga caggaaatca gcggccatgg cctcgattcc 120
ggcgacgacc ttcgccgtca tcttatccgt cctcttctgt gccgcggctg gcaccgccgt 180
cgacaacgac ctccccgact acgtcatcca gggccgcgtc tattgcgaca cctgccgcgc 240
cgggttcgtg accaatgtca ccgagtacat cgcgggcgcc aaggtagaggc tggagtgcaa 300
gcacttcggc accggcaagc tcgagcgctc catcgacggg gtgaccgacg ggaacggcac 360
gtacacgata gagctcaagg acagccacga tgaggacatc tgcgacgtgg tcttggtgga 420
g 421

<210> 5624
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-G12

<400> 5624

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accggagcaa cgacgagaaa gcatccatgg ctgcctgtgt gggttccctg tgtgcgcgtc 120
cgccggcgcc gccatggcgg cgtccgcctt ctcttcctgt ggcatggact ccattctcca 180
tccccatgat tcccttcctc gcctgctgtt gaagatcatt cctgccacaa cgccagagga 240
gaacaggagg aggaatccac agcccaggta tgctagaaat cccccagact agctgccgct 300
ggatccggtc gatggcccct cgccctccac ctccaggctg catgcgcgtg ttcacgcct 360
gttgtctcaa gtgtaaaagt gtgcccttcc ttcattgtcg cgatccctt cccacacga 420

tccacttccc caatccctgc gcc

443

<210> 5625

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-G2

<400> 5625

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cacccgctcg gagagtcgga gcccggcggc cggagggcga cgtcgtccct aataaatact 120

aataatttat cactatacat aaccaatata taagccatgg gcaagcgcag cgtccctcgg 180

taccctgagg acgaggacaa aggcggctgc tgcggctgcc tgtgctggtg ctgctgcttc 240

ctgttggtca tcgtggcggc gctggccggc acggccgcct acttcttctt cgtgtacaag 300

cccaaggcgc cgtcctactc cgtgagcaac atgtccgtct cgcagttcga cttcagcacc 360

tccgacctga cgctgtacgt caagctcacc gcctccgtgc gcgccgagaa cccaacg 418

<210> 5626

<211> 237

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-G3

<400> 5626

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tcgggctcgc cgcgggctct gacgacgatg aggacggcgg tcgtataagg aagccccatt 120

tcaactatgg taagtttaat gcggatccgt ggaccgaagg gcaggctact tcacaatgcg 180

ggcgtcactc gttaacacaa cctactgagc gaggctcatg gtgtgatgcc gaccatc 237

<210> 5627

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-G4

<400> 5627

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 cccgctcacc tccaacaacg gcatcaagca gcagggcgtc cgctacgcca accccatcgc 120
 cttcttccgc aaggacccgc tcaaggagtg cggcgccctc ctcgagaagt acgatctcaa 180
 ggacgcctcc gagacgccat gatcgtcctc cgtcctgtgc atgcctgcat ccattgctgc 240
 cctgcccgtc cgccaagaa ttgaagatgg tagctgcctt ccgcgttttt tgtattgtgt 300
 atgtctatgc actgcattcg agggcagcga taatgggcct ggccctcgtaa gcaaacgttc 360
 gatccgcttc ttttgatggg cctaaatctg catgcatgca gatgtactgc tacttctgct 420
 cttttatatt gctttttttt 440

<210> 5628
 <211> 373
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-048-Q1-E1-G5
 <400> 5628

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 gccgtacgtg ccagggacga cgccggggcg cccgatggagt tcacgtcgtc ctacttccac 120
 gccttcggga gccccgacct cgcgggcgtg gtctccggcg acggcgggag cgcgcaggcc 180
 caacggccgc gccgtccac cgacggggcg aaggcggagg acggcaggag gtccaccacc 240
 acaacggcga ggcgcgccacc gtccatgttc tgcgtccccg acacggcagc ggaggacctc 300
 aacggattcc tggaggagtg caccttctgc cgcaaggcgc tctgcggcga gatcgtcatg 360
 tccagagggg aca 373

<210> 5629
 <211> 72
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-048-Q1-E1-G6
 <400> 5629

caaaaggatc aaaccttact taccctgtaa tgcaacttca aacccttca aaagtgtcac 60
 caaaattcaa tt 72

<210> 5630
 <211> 429
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-048-Q1-E1-G7

 <400> 5630

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 attcagcgcga gcgcaggtgt gaaggaaggg ggacgcggag gaagatgggg ctgcggttcg 120
 ggaagctctt cagccggctc ttccccaaga aggagatgcg gatcctcatg gtcggcctcg 180
 acgccgccgg taaaaccacc atcctctaca agctcaagct cggcgagatc gtcaccacca 240
 tccccaccat cggtttcaat gttgaaactg ttgagtacaa gaacattagc ttcactgtct 300
 gggatgtcgg gggtcaggac aagatcagac ctctttggag gcattacttc cagaacaccc 360
 agtgtcttat ctttgttgtg gacagcaatg accgtgaccg tgttgttgaa gccagagatg 420
 agctccaca 429

<210> 5631
 <211> 431
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-048-Q1-E1-G8

 <400> 5631

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 tgaaatcagt cacttcaatc gtcgatgggc taaagaaatc gtacattgag aagttgaggc 120
 ccttggaataa aacctatcag ttccatgact tcgtgtctcc cttgctgact agcagcgatt 180
 tcgatgcgaa gccaatggtc atgctgttgg gtcaatactc cacggggaaa acaacattca 240
 taaagcattt actaaaaaca agttatccag gcgctcatat tgggccagag cctacaacgg 300
 acaggtttgt tgtcatcact tctggaccag acgaaagatg cattcctgga aacaccatcg 360
 ccgtccaagc tgacatgcc aacagtggcc tgtcatcggt cggaacagca tttttgtcca 420
 agttcgaatg t 431

<210> 5632

<211> 428
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-G9

<400> 5632

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tcgcgttcgg cgacgccacg cgggacatca tcaccaccaa cctcggagcc ggggtggctgt 120
cggccgccgt gcagctgggg ctctgcatca acctcttctt caccatgccg gtgatgatga 180
accccggtga cgaggtcgcc gagcgctgc tccacggcaa gcggtactgc tgggtggctta 240
gggtggctgct ggtegtcgct gtcggactcg ccgccatgta cgtgcccac ttcacggact 300
tcctggcgct cgtegggagc agtgtctgcy tcctcctcgg gttcgtgctg ccggcctcgt 360
tccacctcaa ggtattcggc gccgagatgg aatggcccgg agtgctgtcc gatgtcctgc 420
tggtcgtg 428

<210> 5633
<211> 398
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-H1

<400> 5633

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tacgacctcc tcgtgcgggg gctggacggc gccgacaatt tcaatggggg tgtgagcggc 120
ccctctgcct atgtactgaa gtcgaattg ttggctgcaa aaaatttgat ggccggctaac 180
ttaaattggga catctgaccc atatgcattg atcacttggt gtgcagagaa gcgtttcagc 240
tccatgggtcc ctgggtcaag ataccaatg tggggagagg aattcaattt ttttgttgat 300
agtcttctcg taaagataaa tgtcacgata tatgactggg acattgtatg gaaaagcaca 360
atccttggct cttttactgt tactgttgaa tctgaggt 398

<210> 5634
<211> 397
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-H10

<400> 5634

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ccgcccctcc cccacgctgg cgcacccga cagggggtgc gcggcgctcg ccgccaacgg 120
ggccggggccc cggcggcggc ggtgggcgcg ggcgcggatc ccgcggtaca gcgaggcgtc 180
cacctcgggt ctgccgcgcg cgcgcgcgcc gccgcacgag gcggcggagt cgtcgtctgg 240
gggcaagagg cgacggcgca aggtggcgcc ggcgccaag gaaccggctg aggaggggac 300
cgccgcgctg cttccgatgc cgggctcgcg cagcttcagg tactactggc agaagaagac 360
ggccgcccgc gacaggatcg tggacggagc cgacgcc 397

<210> 5635

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-H11

<400> 5635

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gagaagccca tggacctgaa gaaggcgctg aaccacgtcg ccgtcttggc atcgtcgatg 120
ggaatgacgg acagtggcgc ttacatggag caccgtctgg ccggcggtga cagggtgcag 180
atcacggggc tgaacgcggg cacgtggac ctgacgaata acggctgggg ccacatcgctc 240
ggcctcgtcg gcgagaagaa gcagatctac accgacaagg gcatgggcag cgtcacctgg 300
aagccggccg tgaacgacag gccgctcacc tgggtacaaga ggcacttcga catgccgtct 360
ggagaggacc cggtcgtgct ggacatgagc acgatgggc 399

<210> 5636

<211> 132

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-H12

<400> 5636

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ccaattggcc aaaactgtta cgtcgcctca gttcattggc acgtcgaatc gcaagttcgg 120
gactgagagg tt 132

<210> 5637
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-H3

<400> 5637

caacactcta cagtgagtcg tatgtatggt tactccgcgc gccttctctt tctctcccgg 60
acgtcgatcg tgttcttcag cacgggctag ctagctccct cgctctcagc catggcgacg 120
ccggacaaca atggggcacgg gcatccgctg cacaagtttg gggagtgagg cgtgaagaat 180
ccggccacgt ccgaggggctt caccgtcata ttccagaagg cccgcgacga caagaagacc 240
accaccggcc ctggggctgg gaacgcgcgc gcaggcattc cgccggcctt caagaacggc 300
ggcggcgact gcgggtacag gcccgacttc ggcgacggca accagtacac gccgccc aaa 360
cggaagaagt gggccttctg tggctgctga atcgaagctc gctg 404

<210> 5638
<211> 121
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-H5

<400> 5638

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cgccgctgcc gtcctaagg acgctctaac gaccacgcac cgagtgaggg atattcaggg 120
g 121

<210> 5639
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-048-Q1-E1-H8

<400> 5639

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 cgactacctg cttgaacagg gcatgtaact actacgtacc agctggaatg catgtcgacg 180
 acgatggttt cgagtttcga cttccaataa tagtaacaac aaagcaaagg ccttcctccc 240
 ggcgtatattg ctttggtctt tctcctccac gccataagat atctagcaat tggtagactg 300
 ccttaattag ttcgctttgc ttttgagggt gactcgacca ttttgctgta gcgtgaattg 360
 catggacatg caacgctcca atggcctttg gaatgtggaa tttttttccc gtttctgtaa 420
 ttttcctata aaat 434

<210> 5640
 <211> 329
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-048-Q1-E1-H9
 <400> 5640

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 tgccgatgcg ggtgatggag tccgactcca tgcctctgt gaagctccgc gtggagacgt 180
 ctggggcggt gaaggcgcg aagcagaagc tgccttcgg cgggcgcgag ctggatcgcg 240
 aggaacggcg catcctgtac tacggtatgg cggacggcaa gggtgtgcac ctggacatcc 300
 gcgctccgga cgtgcgtctc atcatcgtg 329

<210> 5641
 <211> 502
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-049-Q1-E1-A1
 <400> 5641

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 tcgactgctg agggtaatcg aatcgtggca ccatggcggg catagctggg actgcacacc 180

gaagaagaat gccgccgccg tggattcacg acctggatgt cgctccggtc tcggcttgcg 240
gttgggaacc ttcgtcaggg tgctctggtg ctctggttt cctcggcggg cgcgattggt 300
gtccagatcc ctgcgaattt ctgccagag tccaactccg cagtggagcc gcagctcacc 360
gtggacagct cccctggcgc catctctgtc ttggcgcgtg gacacgtgtc atctgaaaag 420
caagttggtg cctggaatct caagtgccag gagaagagca ggtgggtcaa gangagccac 480
aaagcgagga gtatgatctg at 502

<210> 5642
<211> 486
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-A10

<400> 5642
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attggcgtcg gtgacgactg catctccatc ggccccggga cctccaaggt gaacatcacc 120
ggcgtgacct gcggccctgg ccacggcatc agcatcggca gcctagggcg gtacaaggac 180
gagaaggacg tcacggacat caacgtcaag gattgcactc ttaagaagac gatgttcggc 240
gtccgcatca aggcgtacga ggacgccgcc tccgtgtcga ccgtctccaa gatccactac 300
gagaatatca agatggagga ctacgccaac cccatcttca tcgacatgaa gtactgcccc 360
aacaagttgt gtactgcca cggcgctctc aaggtcaccg tcaaggatgt caccttcaag 420
aacatcaccg gcacctctc caccgccgaa gccgttagcc tgctctgcac tgccaaagtc 480
ccatgc 486

<210> 5643
<211> 493
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-A11

<400> 5643
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gacttcacca acggcaacgg cacggggggc gagtccatct acggcagcac catcttctcc 120

gacgagaact tcaagcacac ccacgctaaa gccggtacgc tgtccatggc taactacggg 180
cccgactcca atgggtccca gttcttcac accaccgtag acgaaaaccg gttgccaag 240
aagctggacg ggcgccacgt ggtgttcggc aaggtggtga aagggatgga cgtcgtgcgc 300
aagatcgaag ccgagggcca gctcaccggc gtgccaagg ccaaggctgt catagccaac 360
agcggccagc tgccagcgcc cgccgccgcc ggccatcgtg acctctgac gatgacgagg 420
agaacgactc acgatccatc aatccggtcg atctgtcttg ttcgttaaga aaccaaactg 480
gtgcatgggtt aat 493

<210> 5644
<211> 266
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-A4

<400> 5644
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cgtctccaag atccactacg agaatatcaa gatggaagac tcagccaacc ccattctcat 120
cgacatgaag tactgcccc acaagttgtg taccgccaac ggcgcctcca aggtcaccgt 180
caaggacgtc accttcaaga acatcaccgg cacctcctcc acccggagg cgttagcct 240
gctctgcact gccaaaggctc catgca 266

<210> 5645
<211> 471
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-A5

<400> 5645
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tcggcagcgc ctactacatc gcgccggagg tgctgaagcg gagctacggg cccgaggccg 120
acatatggag cgtcggcgctc atagtctaca tcctgtcttc cggcgttccg cccttctggg 180
cagagtcgga gcacggcatc ttcaacgcca tcctgagggg gcaggctgac ttcaccagcg 240
acccatggcc gcgcatctcg caggcgcca aggacctcgt caggaagatg ctcaaccctg 300

accccaagca gcggatttct gcatacgacg tcctcaacca tccgtggatc aaggaggacg 360
 gcgaggcgcc ggacacgccg ctggacaacg cggtcctcgg ccggctgaag cagttcaagg 420
 ccatgaacca gttcaagaag gcggcgctgc gggcatcgc ggggtgcctg t 471

<210> 5646
 <211> 100
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-049-Q1-E1-A6

<400> 5646

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 cccgaccgcc acatctatta agtgcagcaa tgggtgcctg 100

<210> 5647
 <211> 482
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-049-Q1-E1-A7

<400> 5647

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 cttctttgct gccattccat ggtatcttgg agcttttgtg ctgatttgtg tccgagtacg 180
 tgattacagg gagaaaccag gatatgttgc ttgcactatt gctgcctcgc ttgctgcaat 240
 tgctgtgctg cttggcgcca caaaaggagc ggaggtgtgg tgagcattat gccttcaatt 300
 accagcagtc cggttaatgt aaatgtccgt tgctcggcta ctttgttacc tgtgtgttac 360
 atgtgttgtg cgtacaaagg atanggtgta acgaaaatga tgtatgctcc tatttgtagt 420
 tggacatata catttgacaa acggagtanc atgaatgcac accctcatta atcatttgat 480
 gt 482

<210> 5648
 <211> 407
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-G5

<400> 5648

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gtgtgtgagc ttgcgcaaat tggacatcta ggccgtgcgt accctgcgat gaaaggcgcc 180
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ttcaaaggca gcggcgatgg cgggagggcc gaggagggcg agatgtccac gtcggtgaag 300
tccatcaagt ctttctgcc a gccgtggac tacagggaga cgtgcgagaa ggcgctggag 360
gcggcggccg ggaacgcaa caagcccacg gagctggcca agggcat 407

<210> 5649

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-G6

<400> 5649

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atgtgcgaga tcgagggcca ccacctcgcg gcggcggcca tcgtcggcca cgacggtgcc 180
gcctgggcgc agagcacggc gttccccgag ttcaagaccg aggacatggc caacatcatg 240
aaggacttcg acgagccagg gcacctcgcg ccgacaggcc tgttcctcgg acctaccaag 300
tacatggtca tccaaggcga gcctggtgcc gtcacccgtg gcaagaaggg atcaggaggc 360
atcacctga agaagacagg gcaggcactc gtggttggca tctacgacga gccgatgacg 420
cctgggcagt gcaacatggt ggtggg 446

<210> 5650

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-G7

<400> 5650

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tccttggttg gataggtttc aaaggcatga gagtgatgag ggtcaaaaat ctgaacctct 120
acgcttttgg tttatatatg caaccgactt ctatccgtga gaagttgggt cctaagtatg 180
cttcatttcc aactgacaag ctgatggaga accctgattt ctatagtgat cttctcagag 240
aaaaccttga tataagggtc aggttgggtg ttaactacaa tggccttagc gttgggtgcag 300
tgcgagatgt gtttgagaag tcccttggcc tgcggctgca gaagatgaat cctaacacag 360
actttcactg cttgaagacc tttggttctc acttcacaga agatatcgct ata 413

<210> 5651

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-G8

<400> 5651

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cgatgagcac ctcatgtgag agatcgaggg ccaccacctg acctccgctg ccatagtcgg 120
ccacgacggc gccgtttggg cccagagcac cgcattccca cagttcaaga cagaggagat 180
gaccaacatc atgaaggact tcgacgagcc cgggttcctg gccccgaccg gcctcttcct 240
cggccccacc aagtacatgg tcatccaagg cgagcccgcc gctgtcatcc gcgggaagaa 300
gggatctgga ggcataactg tgaagaagac agggcaagcg atggtgggtc gcatctacga 360
cgagcccatg acccccggcc agtgcaacat ggtggctgag aggtcggcg actacct 417

<210> 5652

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-H1

<400> 5652

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ctcctaccac tacggccaga tcaacatcac ccgcaccatc aaggtcatgg tctcccgcg 120

ccacatcgac ggcaagctcc gctacggctt caacggcatc tcccacaggg acaccgagac 180
 cccctcaag ctgcccaggt acttcaacgt caccgacggg gtgttcagct acaaccagat 240
 gggcgacgtg cccccgcgg tttacggggc actccatgtc atccccaaag tcataccgcg 300
 cgagttccgg accttcacgt agatcgtctt cgagaacccc gagaagagca tagactccct 360
 ccacctcgac ggctacgcct tc 382

<210> 5653
 <211> 410
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-H10

<400> 5653

ggtcagggac tcccgggtcg acccacgcgt ccgcaactcg ttgctggggg cgggatcccg 60
 gccgagcacc atgcgaggaa ataacatgcc gcggcacacg tcgccgttac tttttgcctt 120
 gttggcgacc ctgctcagcg tcggcgacgc gttggctcgtc gacggcctgc aggtgggggtt 180
 ctatggaaag acgtgcccgg cggccgaagg cgtcatcagc gacatcgtca acaacgaaat 240
 cgctatggac cggggcatct cccctggcct cattcgctc ttcttccacg actgcttcat 300
 cacgggttgc gacgcttcca ttctcctgga cgagtcgccc gccggcgacg tcccagagaa 360
 ggagtcgtcc gccaacgggt tcaccctggt ccggctcaga aacatcgaca 410

<210> 5654
 <211> 393
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-053-Q1-E1-H11

<400> 5654

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 gattggagtg cgcaatggga ggctgtgcgg gaaaggtacg tcgtgatgac gaagaaaagc 120
 ttgattttaa aggtggaaat gttcatatta taacaagcaa tgagggctgg gaccagaaga 180
 ttgcagaagc aaacagagat gggaaaactg ttgttgcaaa tttcagcgct tcctggtgtg 240
 ggccatgccg tgtcattgct cctgtctatg ctgaaatgtc aaagacttat cctcaactca 300

tgttcttgac aatagacggt gatgacctga tggacttcag ctcttcattg gacatccgtg 360
 caancccgac attcttcttc ctcaagaacg ggc 393

<210> 5655
 <211> 401
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-053-Q1-E1-H12
 <400> 5655

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 actgaaattg gccaaccag aagctgtctt tgacattgtc aaagacatgc atgagctctc 120
 ccaggagcaa ggtgtcatat cacagatata tagttccttg acttcaccc tcttcttacc 180
 atcgctgaa agcaccctc tccaacttat ctgaaacccat caagctagga ttgatattgt 240
 tgacatcgtg aacttggcat tgtccctaca gtgtgggcgt gctttcggct gatccgctca 300
 catggtagtt acgggcaggg tcgtttgact gacagggtct cgcggtgtgat gatgtttgcc 360
 ttcatgttaa cttttggtaa aaaaaaaaaac attcattcat a 401

<210> 5656
 <211> 284
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-053-Q1-E1-H2
 <400> 5656

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 aaaaaaaaaa ggacagacac acaaaaaagg taaagggttc aaaaggcgta aacgcttaca 120
 tcatcatggg tctaagggtc aaccttcttc taaattgcc cccggttgct tttcaatggc 180
 tttacttggg aaacctcgtc attgcaaaac tcaggcggtt tacaacctat ccccttttgc 240
 acaaaatgcc ttttaccctaa ccggccgtaa acgatatcgg gtcc 284

<210> 5657
 <211> 182
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-053-Q1-E1-H3

<400> 5657

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 tcgtanggga gataatgccg gatggctttg taaagtttgg gaggacatgc atcataattg 120
 aagtcaagtg ataggatcct gttttttaag tacacgatac aacacaatct taacatanaa 180
 aa 182

<210> 5658
 <211> 375
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-H5

<400> 5658

ccacgcgtcc ggccgggttc gtgaccaacg tcaccgagta catcgcgggc gccaaaggtga 60
 ggctggagtg caggcacttc ggcaccggca agctcgagcg cgccatcgac ggggtcaccg 120
 acgcgaccgg cacctacacg atcgagctca aggacagcca cgaggaggac atctgccagg 180
 tgggtgctgt ggccagcccc cgcaaggact gcgacgaggt ccaggcgctc agggaccgcg 240
 ccggcgctct gctcaccagg aacgtcggca tctccgacag cctgcgcccc gccaaaccgc 300
 tcggctactt caaggacgtg ccgctccccg tctgcgcccc gctgctcaag cagctggact 360
 cgacgacga cgacg 375

<210> 5659
 <211> 432
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB148-053-Q1-E1-H6

<400> 5659

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 tcgaatggga aatgctaagg aacctctttc gacaattata aataaactgg aagacattaa 120
 tacatattta gcctctatta ctgcatctga ggtctggtct gtttacatga aggtctgaac 180

aagtggaacc tgacaaggat ggggtgtggct ggattacaac aggattgaag ttgattggca 240
 ggaaatgatg ctacttagca attgttcctt gactataact gcctacaaag ttgtgcaatt 300
 gtgatgtcgc atcgtctggag aagacgggca cggcgacgag tccgacctgg tcaagagctg 360
 caactgcgaa atggacaaaa aaggtacctc gtggagtttt gtgtggggga tcangtcggt 420
 gggtagatcc ac 432

<210> 5660
 <211> 384
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-H7

<400> 5660
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 gtggagaaga tcaaggacaa gatcacgggc gagcacggcg acaagtccgg cgaccacaag 120
 gacaaagacc ataaggagaa gaaagataag aagaagaaga aagagaagaa gcacggggaa 180
 ggccatgacc atggtgatgg tgacggccac agcagcagca gcagcgacag cgactgatct 240
 cgcttcgccc agcgccgtac gcacaaatgc accgcgcagg ttataatacg agctgtccgc 300
 cgaacacccat gcgcataatat tatacagtac tcgccaagat tgttgttctg caatcttcgg 360
 gataaaaagg ttcttttttt gttt 384

<210> 5661
 <211> 447
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-053-Q1-E1-H8

<400> 5661
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 ggggctcgcg ggcgctgtac gagcgggcct cgtccgcgga caagtccttc aagctttacg 120
 acgggctgct gcacgacctc ctgatcgagc ccgagaagga cagggtgatg gacgacatcg 180
 tcgctgggct gagccccagg gtctgacgcc gccggcgctg tgcggtgctg gccgtaggac 240
 gcgagcggct ttctgacccat ctgcaggcca aggacgcctc gcctccggat ggtgggtgat 300

gacgcggtct ggtctggtag gctgcggacc gagggagagc ggggtgtgct tctcgcccc 360
 ttggtgtgct gaactgctga tacgatacga ggagcaggac aggagtacgg agaactacta 420
 ctacctacgg ctatgggcga tggcttt 447

<210> 5662
 <211> 377
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-053-Q1-E1-H9
 <400> 5662

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 gccacgatcc ctccaaggcg gacaagggat tccacggagg agggtaacccg gccgccggtg 120
 gatactacgg cggccagtac cccggcggcg gctaccctgc tccaccgggc ggcgggtgcgt 180
 accctcccgg gcctgggtac ccggtaccac ctggtgggta cccgcctccg ggtggctacc 240
 ctcagcctgg cggatacccg ccgtcgcacg ggcgtaccc ggcgcggggt gcangcgcgt 300
 atcctcccag cgggtacccc catcaaccgg tctaccacaca gcctgggtat ccacgatgc 360
 ccggtcatgg tggcatg 377

<210> 5663
 <211> 437
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-056-Q1-E1-A10
 <400> 5663

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 gaggtcgcg aaggaggagg tcaagacggc cgcgacgcc gaggcgcgga gggcgctgaa 120
 cctctgcaag acctactacc tggacgccgc cgacaacctc ggcgcctgca agcgcgccat 180
 cggcttccgc gacgccgtca ccatccgcgc cacgatgagc atggtggcgc aggacacgca 240
 gaactgcgac gaggagtcca ggaaggccgt ctccaagaac cccatggagg accacaacag 300
 gtcgctcatc gagatgtccg agatctgcc cagctctcc aacatgatcc cttacgaaca 360

tgtccattga tttgtttggt tctttttccc gacccctac tacgttcggt aacgtcgtcg 420
tcgtcgtcgt cgtcgtc 437

<210> 5664
<211> 354
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-A11

<400> 5664

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gctcatgacg gccgatgtct cgacggccgc catgctctgt gcaccggggg cgccgtgcct 120
cggcttcagg aatgacatgt atgctgtcct ttcacccat tgccctagcgt cactgcatca 180
tctaccgcta tgctattaat attctttcaa ctatcaacaa tgtgggtcag gactcacata 240
actctgaaga ggatttcagg accgtcgtct tcaataaccc catgtacgat catatcatgt 300
cactcacgct catgttcgat atctacaaca cgctctcaag cattatccct tacc 354

<210> 5665
<211> 456
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-A2

<400> 5665

ttcccggatc gacccacgcc tccggggaca atggacagtg tccgcactgg accctatggg 60
cagatcttcc gccctgacaa ctttgtgttt gggcaatctg gtgctggcaa caactgggcg 120
aaggggcatt atactgaggg cgctgagctc attgactctg ttctcgatgt tgtgaggaag 180
gaagccgaga actgtgactg cttgcaagga ttccaagtat gccactccct tgggtggcgg 240
actggatctg gtatgggtac gctgttgatc tcaaagatca gggaggagta cctgaccgc 300
atgatgctga cattctcagt tttccctca ccgaaagtat ctgatactgt ggttgagcca 360
tacaacgcca ctctttctgt ccaccagttg gttgagaacg ctgatgagtg tatggttctt 420
gacaacgagg ccctctacga catttgcttc aggact 456

<210> 5666

<211> 360
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-056-Q1-E1-A6

 <400> 5666

 ccacgcgtcc gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agacaaacga 60
 acataaaaaag aaaaaaaatt aaataaaaga gaaatcaaaa aaCaaaacac agcaaaaaag 120
 gcacagcaaa ttgagggcgg cggccctagg ggttccagcc tcagttacgt gaaaaccctc 180
 cgtttaacca ctttaatcgg gtctcagaat ttccttcttg tggcactcgt tttcaacatc 240
 catgattggg aaaccccgtc ggttgccgac attaagcccc tttcagcaga tcccgtttcc 300
 tcccgtgggt gtagctccta agcggccccc cccgtttacc tttcccacaa tttggccacc 360

<210> 5667
 <211> 406
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-056-Q1-E1-A8

 <400> 5667

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 acatcagcca tggggcgctg cgcaaccaag cccaagacgc ttgaggggca ggccccagct 120
 gatgccgcgg tctccacacc caagggttgcg cccgaggcca ctccaatctc cgttgagggtt 180
 gcggctgatg aacaggtagc tgagaaggtg gtggtggagg agccggctgc ggcgccgac 240
 gttgagcatc agaaggctaa tgaggtgctc gtcacagagg cggccgctgc cgagcccagc 300
 cacaatgagg aggaagccgt ggagaagacc gtcgtcgatg aggagaagcc agcggcagca 360
 gcccatgcag aggaaaaggt cgccatcgcc gccgagacca cgacga 406

<210> 5668
 <211> 388
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB148-056-Q1-E1-A9

 <400> 5668

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cctcggcccg cgcgggggcg cggcggtcat gacggctcgg gcgcggtagc ctcggccccg 120
gcgtctccgt cccggtgcgt ctccccgtgg tacggcggac cccggactca acagctcggg 180
ggcgcgactc cctgcgacgc gtggcctcat ggcctgatg gctcgtgcgc tgttgcccac 240
ggtgcgcggc cccacggccc ggcggtcag gcgcggctgc ctgctacgca cggccccag 300
ccccggcagc tcgtgcacgg ctgcctgcga cgcgcgcacc cccggatcca gtggatcggg 360
cgaaggcccc ctgcacgcac tggtgagg 388

<210> 5669
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-B10

<400> 5669
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cgtcttccat ggctctctcg tagtagaata gttctatctc accgcaacaa ctctcatta 120
catcctttat gagaggctga tcgattggta gatacgact cgggtggagc agagcaacga 180
gagacatggc gacgacgacg cgtgttgccg ccgccgccac cggcgtgctg ctggtcctgt 240
cggcgttggc gacctggcg cgggccgagg acccgtaact gttcttcgag tggaaggatga 300
cgtacgggac caagtccttg ctgggcgtgc ccagaaggc catcctcatc aacggcgagt 360
tccccggccc caggattaac tgctcctcca acaacaacat cgtcgtcaac gtcttcaacc 420
agctcgacca tc 432

<210> 5670
<211> 424
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-B11

<400> 5670
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catggcatca tcggccgcgc tcttgggtgt agcctcgcg ctagtggcgg ccaccgcccc 120

acaggtagcg gaggcaaaga agaagagagc ggcggagagc ggcgagggcgg cggagggcgaa 180
gaagatccag gacgacttct gctcgacgct gtgcgagggc aagaagggga cggacctgggt 240
cgtgtgcaag gagtccctgcg cgctctccca gcagtccaac ctggtgctgt acggcaggat 300
ccagtgcaag ggcaagtgca ccgagcagaa gggcatcacg gcgccggcca tgaaggtctg 360
ccaggaggag tgcgacaagg cgtacgtggg gaaggcggcc gaggtcacca aggcctgcag 420
cgtc 424

<210> 5671
<211> 457
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-B2

<400> 5671
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tcatccagcc ttctgctctg ctccctcgaa atggaggcga cgagcaaggc gatgggttca 120
ggcctcctcg ttctgctgct tctcatcaac acaggctttg tcttgcccggt ccattccgag 180
gactgctggg ccgacacccg cgtcatctgc accaagacgc acaactgccg ggacgacact 240
tgcgcggggc gcggcatgcc ggacggccgc tgccactggg agttccccaa cctgggtgcc 300
ttctgccagt gcctgcgccc caactgccac tagtccgggc gcctcggatt ggctcacttc 360
gccggcgatg atggatggtg cccaactgcg actgcccagt ctgctccatt cgttggtgtt 420
taaggcataa tatataaact gccaaattca catgtat 457

<210> 5672
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-B3

<400> 5672
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gcggcgccgc cgacctctc cgcgacgcgc tggacaacct caaggcgaag atctacggca 120
aggccatgga gcagctgacc gccgcaatgg gcgcctccga aaactgcgaa gacgcgtgga 180

acggccagga ggaggggtgtc cccgtcgccg cgcacgacaa ggagtagcgt cggatggcgc 240
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 aattagtata tatatatatg catgctatct actatgatcg atcgctttctc gaccttcttg 360
 catcgatctg catgcatatt ataatttata ttagattgat gccacgccgc atgcaggt 418

<210> 5673
 <211> 384
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-056-Q1-E1-B5
 <400> 5673

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 ggcagcacca agggttgcct caaggagctt gcatgcttct agaccctccg tcgactgacc 120
 catctctcta gttataatct ttctctctgc cttgcattgc ccattacatg ctatccattg 180
 gtaacgcaca agagtaaaac gacagacatc cgacagctat attatgttcg acggtgtaac 240
 accctgaatt tgaggggtata aaatttcttc gctaaatacc agccaaattc aggtgttacc 300
 tcgtgtctct ctcgctctcg cttttccttt tgattaagag taagtgaaaa agaggaaaag 360
 cagggcggcc gctctagagg atcc 384

<210> 5674
 <211> 450
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-056-Q1-E1-B6
 <400> 5674

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 aaaaaaaaaa aaaaaaaaaa aaaaaaagaa taaaaaaaga aaacatacat aaatattaaa 120
 aaatttgtat acacatacat catatcatct taaattttct cgcattgtcac ttctatttcg 180
 tttctttggc cgatcctttt gtttattcgc gtcgtggaat atccatatat tcacccactt 240
 ttatcatctt gtcgggtgtc acactttttc cttgtggcta tattatttct tctctagcta 300
 cgaattacga ttcacatctt ttctcgtgt ctctctctct cgctcttctc cctttgtttc 360

ggcgtatgtg ccgcgctgtc tatggtgctt acccgctcta tgggctcttt ccttacttac 420
gccttaatgc catttccttt ctcttcctt 450

<210> 5675
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-B7

<400> 5675

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acaggtcata gctaagcagg tctgacagga tgcgtggca gacatacgtc gatgagcacc 120
tcatgtgcga gatcgagggc caccacctga cctccgctgc catagtcggc cacgacggcg 180
ccgtttgggc ccagagcacc gcattccac agttcaagac agaggagatg accaacaatca 240
tgaaggactt cgacgagccc gggttcctgg ccccgaccgg cctcttctc ggccccacca 300
agtacatggt catccaaggc gagccggcg ctgtcatccg cgggaagaag ggatctggag 360
gcataactgt gaagaagaca gggcaagcga tgggtggtcgg catctacgac gagcccatga 420
ccccggcca gtgc 434

<210> 5676
<211> 448
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-B9

<400> 5676

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caccaaatct atctgagga tgcgagcgcg ggcgacaaga tgccaagcgg cggtaagccc 120
gcggcttcgt cgaagccgaa gccgttcgaa tcggactcgg actcggagtc cagcagtaag 180
ccggcgaatc aagtccgggg cgtcgtcgta ccaggctccc gccgacgcca aaaagcggta 240
caaggacggg ttccgggact cgggcgggct ggagaaccac tcggtgcagg agctggagca 300
ctacgcggcg tacaaggccg aggagacgac ggacgcgctc gccggctgcc tgcgcatcga 360
ccgaggacat caggcaagac gccagcgaca cgctgatcac gctgcacaag cagggggagc 420

agatcagcct gacgcacgag aaggccgt

448

<210> 5677

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-C1

<400> 5677

cgaccacgc ctccgcacga gggcgaaacc cacaaaccct ctccctcccg tactccggcc 60

tacacatcca ggggcgatga cgctgggtag ctccggcgcc ggatcgagcg tcgtcgttcc 120

ccgaaacttc aggtatttag aggagctcga gcgtggagag aagggcattg gtgatggaac 180

agtgagctat ggaatggatg atgccgatga catctacatg cggtcatgga ctggtaccat 240

cattggccct cacaatactg tacatgaggg tcgcatctag cagctgaagt tgttttgtga 300

caaggactat ccggagaagc caccatctgt cagattccac tcaagaatca acatgacatg 360

cgттаатсас гасасасгаа тgggtgatcc aaggaagttt ggtttgctag cgaactggca 420

gcgggactac acaatggaga acat 444

<210> 5678

<211> 134

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-056-Q1-E1-C10

<400> 5678

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gggcgacggg atgccacgcg gcggctggcg cgcggcttcg tcgaaccgga ggcggttcgg 120

gtcggattcg gact 134

<210> 5679

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-C11

<400> 5679

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aataagcctg cgtgcccttc gttcttcctc gtctcgatcc cgacgaecgt ccgttcgggt 120
ccggcaaaacc acatcaagtc gcgatggaga tgaagaaggt cgcctgcgcc gtcctcgccg 180
ccgccgcctc cgccaccgtg gtcctcgccg ccgagggccc ggccgccgcc cccaccagcg 240
cctcctcggc cgcgttcccc gccgtcggcg ccgtgctggg cgcctccgtg ctctccttct 300
tcgcctacta cctgcagtaa aattaaagga ggatcggagg gagaggctgc tgggtgccat 360
tgcctgtatt cggttggatt ccgtttatat atatatttaa gtactttaat ttgggtctga 420
acatgt 426

<210> 5680
<211> 425
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-056-Q1-E1-C12
<400> 5680

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acactccgca tacgcaccta cgagagtcga gtgacagcga gcgagcgagc gagcgaagcc 120
atggctctcc gcaccctggc atcgaagaac gccctatcct tcgcgctcgg cggcgcgggc 180
cggccgtcgg cggcgtccgc gaggggggtg acgacggctg cgctccccga cctctcctac 240
gacttcggcg cgctggagcc ggccatctcg ggggagatca tgcgcctgca ccaccagaag 300
caccacgcca cctacgtcgc caactacaac aaggcgctgg agcagctcga cgctgccgtc 360
gccaaagggc acgcctccgc tgctgtccag ctccagggcg ccatcaagtt caacggcggc 420
ggtca 425

<210> 5681
<211> 435
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-056-Q1-E1-C3
<400> 5681

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tcgccaaccg tagcaaggag ccaaggacat caccaccgcc cagcaataat ggcgagagc 120
atgaggattg tggcgctggc cttggtggcc ctgctggtgg tggccgcggc ggcgcccgtg 180
gccaccgctg accgctgcta cgacgactgc tacgagcgct gcgccaacgg gaagaaagac 240
cccgctgca ccaagatgtg caaccacgcy tgcggctcca cggaccaggg cgccggtgcc 300
gccggcgccc gcgcgggctt gatcgcccag cgcattcatc gcttcagctc gatataatcg 360
ctgctccgtc agcaaccac atatgattcg attaattctt ctctcgaag ttctcgaccg 420
cgtcgaattt ttttc 435

<210> 5682
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-C5

<400> 5682
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ccaaagatga tgtccgagaa ttgatttacc gagagatttt ggagtaccat cctcaaatgc 120
tacaagaata cctacaagga gcagaccaca atcagatgac cttcatgtat ccaagtgggg 180
tggatcgctt caggcgccaa tttgctcatt tggaagaagg tactgcaaag ggtgaaaaac 240
acagtccaca gctgcgacag aatgtttctt tgccaaggga aagagtaatt ggcaataaac 300
atggagatgg caatacaggt gataagctag cgcattgctc agtgacggat ggcattcagcc 360
aaccgagctt gagtgcgaga agctttctga agagtgaag catcagtgct tccaag 416

<210> 5683
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-C6

<400> 5683
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cctgctgcag gtggtcaccg cgcggccacc catggggctc acgcaccacg tcgagaaggc 120
catcgacgcy ggcaccttcg cgcagatgct cgacatcacc gtcaaggact ggcccgtcga 180

ggaggcgctc ggctacgcaa agctcgcgct caagtgcacg gagatgcggc ggagggaccg 240
gccggacctc gcaaccgtcg tactgccgga gctcaaccgg ttaaggaacc tcggccacgc 300
gtacgaggca cgcattgagcg ccgtcggggac caacagtggg agtggcgaaa gtaatgacca 360
ggtcagcggg agctcgccga cggcgggtgg ttcattggaga acggcggaag gctagcgggt 420
ggtacggcgt ggccatg 437

<210> 5684
<211> 440
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-C8

<400> 5684
cccgggtcga cccacgcgtc cgagcacctc ctcttcccc gccgggcaac aactcagccg 60
ccgcaaccgc cacatcagcc atgggcgcct gcgcaaccaa gcccaagacg cttgaggggc 120
aggccccagc tgaggccgcc gtctccacac ccaagggtgc gcccgaggcc actccaatct 180
ccgttgaggt tgccgctgat gaacaggtag ctgagaaggt ggtggtggag gagccggctg 240
cggcggccga cgttgagcat cagaaggcta atgaggtgct cgtccagag gggccgctcg 300
ccgagcccga ccacaaggag gaggaagccg tggagaagac cgtcgtcgag gaggagaagc 360
cagcggcagc agcccatgca gaggaagagg tcgccaccgc cggcgagacc acgacgacgg 420
tggaggcgaa gaagaacgcc 440

<210> 5685
<211> 467
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-056-Q1-E1-D1

<400> 5685
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gccttcgaga ctgtcataga caccagaag gacgccgccg ccggcaggcc acaacacatc 120
taccgcaagt cagcttaaaa catactgcgg cggcggggac gcatcgatcc tccacgcttc 180

gtgtcttcgc ctttaattaat taattaattg ttatgatcat gtcggccagc ccaacgccgt 240
atgcatgcat gcacacggcg ctaattaatc cctgtttatt tactactccg tgaaatgtag 300
tttctccgta tacacggagc agtagtattc tgtaaagagg aaaatggtgg aaaccgatgt 360
tgcattctgc ataaatttat taatagggct agtttcacaa ccttattttt tctaagaggt 420
tttagttttt caagggaatt taattcattt tctcttgaaa aaatagg 467

<210> 5686
<211> 458
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-D10

<400> 5686

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tgattatgcc actgatctct ttaacatggt gtcaatggat ggaacaacag agaaagagtc 120
agcttcatct tcaaacgacg ataatggctg ggatggcttc cagtctgcac aaccagtacc 180
tagttcagag aaaaaagatt ctgccaaacc agcagaaagc aagaccagtc ctacatctgg 240
aatggaagac ttattttaag actcaccagc tgtgccatta tcttcagctc cagctgtttc 300
ccaagtaaac gctaagaatg atatcatgag tttgtttgag aagtccaata tggatatcacc 360
tttcgctgcc catcaacagc agctggcgct catgtctcag cagcaagctc ttctaattggc 420
tgctctcaaa gctggaaatg caccacagat gatgattc 458

<210> 5687
<211> 452
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-D11

<400> 5687

cctgcctgta ccggcccaga attcccagat cgaccacgc gtccgcccac gcgtccgccc 60
acgcgtccga tttatcacta tacataacca atatataagc catgggcaag cgcagcgtcc 120
ctcggtaccc tgaggacgag gacaaaggcg gctgctgcgg ctgcctgtgc tgggtgctgt 180
gcttcctgtt gttcatcgtg gcggcgctgg ccggcacggc cgctacttc ttcttcgtgt 240

acaagcccaa ggcgccgtcc tactccgtga gcaacatgtc cgtctcgcag ttcgacttca 300
gcacctccga cctgacgctg tacgtcaagc tcaccgcctc cgtgcgcgcc gagaacccca 360
acgagatgat caccatcagg tacggcgagg gctccacac cgtgggtctcc taccgcggca 420
cgccgctgtg ctccgggaag ctcccggcct tc 452

<210> 5688

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-D12

<400> 5688

attcccgagt cgaccacgc gtccgcgcag gcccatcgga tccgtttcga gttccacaag 60
ggagcagcgg agcacacgtt catgaggatc gacggggagc catggaagca gcctctcccc 120
aaggaggacg acaccgtggt ggtggagatc tccaacctcc gtcaggtggc catgctggcc 180
aacgaccggt gcagggtccaa gagcgtgaac gagccgtcct ccccgctcgtg ccacggccat 240
gaggacgacg acagcaacag cctggaggac gaggacgagg acgagtggga ggacgggagg 300
aagaagttcg gtgcggcggc caccttcaag attcccgacg aggtggacat cgctcatctc 360
agttagaacc tagaaacccc gccggctgct tctgcgtcgg ttggtgggtgc tgactgctga 420
gtctgtgcat ttc 433

<210> 5689

<211> 326

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-D2

<400> 5689

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gggtggccct ccacctccga tgggcggaat gggcatgcct ccgatgggag ggatgggcat 120
gccgccgatg ggccctggtc cgatgccagc attcgggatg ccaccaatgg gaagctactg 180
agatgagatg tttttttggt gttgttcag agagcttaga tgatgatttg atatgttcct 240
gtgtaagcag aggcggaaac ctcatggag ttgtagatgg ttacattttg gaattaatat 300

tctttatggt accaggaaat ttttgg

326

<210> 5690

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-D4

<400> 5690

cccacgcgtc cgcagacgcg tgaggggagc acagagctag ctagccagcc aagcagcagc 60
caacttgctc gccgcgcccc tcctttcttc tcgcctccgt tccattccgt tccggcctcc 120
accggcgccg ccgcattcag ggatggagat gaagaagatc gcctgcgccg tcctcgtcgc 180
cgctcgggcg gccaccgtgg cgctcgccgc ggggctccgg ctccggcccc caccagcggc 240
tcctccgcgg tcgcgcccgc cgctggcgcc gccctcgggg ccgccgtcgc ctctttcttc 300
gcctactaca ttcagtgagc cggccggggc gcccgaggc cgaggaagag acgaagggga 360
gagagagtga catggctgcg cgcattccga tgcgtgggca tgttttttga ttcgacacac 420
cttttgcct c 431

<210> 5691

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-D5

<400> 5691

ccacgcgtcc gaaacaaacc acagattgag cagctcatat tttggtgtca gtattggatt 60
ttagttgccc tgttgacagt tttggagaga tttggagatt ttacaatata atggctaccg 120
ttttactcag aagcaaaggt gttgttcttt gtatatttgt ggtaccctaa gacaaaggga 180
actacgtatg tttatggaac tttctttaag ccatatattt ctacgcatga gaatgaaatc 240
gaccgaaatc ttcttgagct cagagctcga gccaccgata tggttgtcct ttacttccat 300
aaggctgctt cggtagggca aaatactttc tttgacgttt taaaatatgt tgctgcccag 360
tcgccttctc ggaaatcaag gctgcaccct catcaggaac cacagcagca gcaagcacia 420
gtgcaggtgg ag 432

<210> 5692
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-D6

<400> 5692

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gaccttcgtg gacactccag gagttttatc aggggagaag cagcggacgc agcgcagcta 120
cgatttcacc ggagtcacgt cgtgggtttgc ggccaagtgc gacctgatcc ttctcctgtt 180
tgatccgcat aagcttgaca tcagcgatga gttcaagcgt gtgatcgggt ctctccgcgg 240
gcatgatgac aagatacgca tagttctcaa caaggccgac caagttgatg cacagcagct 300
gatgagagtg tacggagcac tgctgtggtc gtcgggaaa gtcctgaaca caccagaagt 360
catgcgtgtc tacatagggt cattcaacga caagccgatc agggagacag cggctgggcc 420
gctgggcatg gagctgtt 438

<210> 5693
<211> 181
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-D7

<400> 5693

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catatgtttt atttcttgcg ttttccctac aaaatcagcc atatgggaaa cgcaggaaat 120
aaaacattgg cttggacctc ttttttcaaa agaaaaaaaa aaagggcggc cctctagagg 180
a 181

<210> 5694
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-056-Q1-E1-D8

<400> 5694

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 tggagaaagt cgccgagtcg ctggagctcc cctgcaggta ctactcgctg ggggtgccccg 120
 agatcatgcc ttactacagc aagataaagc acgaggcgca gtgcggcctg agaccgtaca 180
 actgcccccta cgccggtctc gagtgcagcg cggccggcga catcccttcc ctctctctcc 240
 acctgagggg cgatcacaag gtggacatgc acagcggctg caccttcaac cacagatacg 300
 tgaaatccaa cccgcgggac gtggagaacg ccacctggat gctgacgggtg ttccactgct 360
 tcggccaacta cttctgcctg cacttcgagg cgttccagct cgggatggcg cccgtgtaca 420
 tggacttcct ccgcttcatg gg 442

<210> 5695
 <211> 436
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-056-Q1-E1-E11
 <400> 5695

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 gagaaccttt ctccctctct cacctttctc cttttcttgc cacggcaaaa caccttcgcc 120
 ggcgagagca tggcgatggc gtaccgtgtc ctggagggtca ccctgggtgc ggcaaatgac 180
 ctcaagaaaag tgctcgtctt ctcccgact cgcatctacg ccgtggcttc catctccgga 240
 ttcgacctcc gcaccccttc ccacagcacc caagcagacc acagcaacgg ctgcaacccc 300
 tgctggaacg ccgtggtaca cttccccatc ccggtgcgcg ctgacaccgc cggcctcgca 360
 ctccacgtga ggctccgcgc ccagcgtcta tacctgggcg atcgcgacat cggcgagggtg 420
 tttgtgcca tcgacg 436

<210> 5696
 <211> 379
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-056-Q1-E1-E3
 <400> 5696

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ttcgctcccg gctccccctc catctctttc gccacacgcg cgagaggggg gagaggaaac 120
 agctagcagc gagcgaggaa cgaagagggg gcttcgcacg tgcattgtgag atcgggcgat 180
 cccgatcgtc ggccggcgcg aattgaacta acgacgacgt acgtgcgacc gggccgggcg 240
 ttggattatt ccggcctgag caatgggcaa gatcgagtac ggcgtgggtg cgcgcgcgcg 300
 ggtggtgctg ggggagcact acggcgcgcg ggcggccggc ggcaacgcgg gcgccgtggc 360
 gcggcaggtc ctggagcgt 379

<210> 5697
 <211> 441
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-B6

<400> 5697
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 tcgcggtcct ggccgcgcgg ccggcgctctg caggcggggg agccgcggcg gtggcggaga 120
 tctgcatgaa gactccgtca cgcgacctgt gcaccaggac ggccggggaag caccgcaaca 180
 agtacaacgt ggtggacgcg gtgacggtgc tagagatgca cgtggacgcg ttcaagaagc 240
 gcgtgaaggc ggccgggagg ctgcgcaagg atgaggtcaa gacggccgcg acgcccagg 300
 cgcggaaggc gctgaacctc tgcaagacct actacctgga cgccgccgac aacctcggcg 360
 cctgcaagcg cgccatcggc ttccgcgact ccgtcaccat cagcgccacg atgagcatgg 420
 tggcgagga caccgagaac t 441

<210> 5698
 <211> 388
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-B7

<400> 5698
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 tcctagtac acaagtggaa gtgggcaaac gatctgtgat ggcttcccgg tgtatagttt 120
 ccatggttca tttgtgtgct tgtcccatgt ttgcctgggg acgatgacgt ttacaattt 180

tggcccccat cgcgcgcaact cgtctgtttc tctcatggaa gccgtgtgaa cctgtgcgtg 240
 tgtgtgacga atgaacggaa ctttatatgg accagtgtt aagagtcttt gcaacataat 300
 tatgaagggtt tgtttgcaaa aaaaaaaca gaaaagtaaa gaataaaaaa aagaagtaaa 360
 aaaaaaagta aagaaagggg ggccgctc 388

<210> 5699
 <211> 439
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-061-Q1-E1-B8
 <400> 5699

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 gtggccttgc tgagcgtggc cctagtgggc ctgtcctct gccacctgc caccaccgc 120
 tccgcccacc agaaagacat ccacgtcctc ggcagcgtcg acggctccag cgacggcagc 180
 agccccgagt ccgaaggccg cgtcgtctac gcggacatga agctggctga tacggaatcc 240
 gatgcgccgg cgccggcgcc ggccggggg ccgtcgtccg gttgaactga gaagcgtgcg 300
 tccagccaag caaggtggtc aaaaccgaga actaattaag ggctcgattg tgtgtccggc 360
 tactactggt cttgccataa ttatatatag atacgcaaag tgtggccaag cctaccaca 420
 tgcattgctat tgcattgctt 439

<210> 5700
 <211> 451
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-061-Q1-E1-B9
 <400> 5700

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 aacgaggaaa gaaaacatgt cttctcgtg ggtagggcg gaggtgtacc cgctgttcgc 120
 gacgacaggg gtggcggtgg ggatctcgt gatgcagctg gtgcgcaaca tcaccaccaa 180
 cccggaggtg cgggtgacca aggagaagcg ggccggccgg gtgctggaca accacgacga 240
 ggggcggcgc tactcgcagc acggcgtgcg caggttctgg ctctccaagc gccgcgacta 300

catgcaggcc atggacaagg tgcccacgga ccctaataag tagacgacga cgatataccc 360
 caatgcatgg caagaagata tatatatcag cacaacgcaa ctgcatgcga tgctgcttgt 420
 tgctgcaatt aatccactat actatatact a 451

<210> 5701

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C1

<400> 5701

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 catcgacgtc gtgcagagct ccacggggat caccatctcc aactgccact tcaccaacca 120
 caacgacgtc atgctcttcg gcgccagcga ctcttgccg caggaccaga tcatgcagat 180
 caccgtcgcc ttcaaccact tcggcagggg cctggtgcag cggatgcaa ggtgccgctg 240
 gggcttcttc cacgttgtca acaacgacta cagcactgg ctcatgtacg ccattggcgg 300
 cggcgacgcg ccaaccatca tcagccaggg caaccgctac atagcaccac caaacatcgc 360
 cgccaaagtg atcaccaagc actacgcgga agaaggcgtg tggaagaact ggggtgtggca 420
 cacggaggac gacctgttca tg 442

<210> 5702

<211> 436

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C10

<400> 5702

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 gtcgcctaatt tctttcgatc gaattaggcg ccttcttcgt cccacgctcc gtctttatct 120
 gtaatctgaa gcttacagga acatttgagt ggatcatgga cggattggta ggctctctga 180
 aagtccgggt ggtgaggggc atcaaccttg cctaccgcga cgcaagagga agcgatccgt 240
 atgtcgtcct acgacttggc aagaagaaac ttaagacgag cgtgaagaag agatctgtga 300
 accccatctg gcacgaggag ctaactctga ccgtcacaga tcccagccta gctctgaagc 360

tggaggtgtt cgacaaggac acgttcagca gggacgaccc gatgggggac gcggagatcg 420
acgtggcgcc gctggt 436

<210> 5703
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C11

<400> 5703

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atccattctc cagcgcagcg aagtaaacad gtctgaccgg gcaaagatgt cgtggcaggc 120
gtacgtggac gagcacctga tgtgagagat cgagggccac cacctcgcg cgcgggccat 180
cgtcggccac gacggtgccg cctgggcgca gagcacggcg tccccgagt tcaagaccga 240
ggacatggcc aacatcatga aggacttcga cgagccaggg cacctcgcg cgacaggcct 300
gttcctcgga cctaccaagt acatggatcat ccaaggcgag cctggtgccg tcatccgtgg 360
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ctacgacgag ccgatgacgc ct 442

<210> 5704
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C3

<400> 5704

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gacgagtctg cggaattatg aaccttcgga tgtacctttt gatatttcac ctgtttcgaa 180
ggaaacaaaa tccaacccc ttgcggagaa aaagtctaca ggcaagaaat cagcagggtcc 240
agcatctgct gtcagtggct ctgtttctac agttgatgct tcgtatgaga agcttctttc 300
gtctattccg gaattcgctg attttggaag gctttttaag tcatctgcac ctgtagaatt 360
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437

<210> 5705
<211> 337
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C4

<400> 5705

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gacgaagggg agagagagt acatggctgc ggcattccg atgcgtgggc atgttttttg 180
attcgacaca ctttttgtcc tttttttctt tgttccctct ttctccttaa tttaacgaat 240
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<210> 5706
<211> 282
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C5

<400> 5706

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gagatttgcc agtctagtgc ctcagccacg gctgacttca cgtgggaatg acctactgaa 180
cttcgagatt acctctgcac atgcatggac ttgtcatggc tcaaggcatc aagcaagaga 240
atgtcaagaa tgacgaatgt agctgctgga tgggtccagat tc 282

<210> 5707
<211> 428
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C6

<400> 5707

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gccataccat ttggtacgat ggtggttggt ttcacacctg gggccttcat ctctttccct 180
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attgcgctta tgggaggact gcttcctttt ggtagtatct ttattgagat gtactttgtc 360
ttcacatcgt tctggaacta taagggtctac tatgtttacg ggttcatgtt gctggctctt 420
ctgatact 428

<210> 5708

<211> 443

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C7

<400> 5708

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gccgccgagg caaactcgaa gccacccccg ccgccgcagc cacagccgcg ccgagcttga 180
gccgtcgttg ctccgctgaa tcgcccccat cgtctctcct gaagagagag gacatttatt 240
gagacagcat gcctaagata aagacaagtc gtgtcaagta tcctgaagga tgggagctta 300
ttgaaccaac catccgtgag ttggatgcca aatgagaga agctgaaaat gatccacatg 360
atggaaagag aaagtgcgaa gctctctggc ctatttttcg tattttctcat caaaggagcc 420
gctacatata tgatctttac tac 443

<210> 5709

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C8

<400> 5709

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gaaattaaag cgctagaagc tcagcagcaa tggcggagca ggcgggcgtc ggaaggtact 180
ggtgccacat gtgcgccgcg gccgttagcc ccgcggaggg cgaggtggag atgaagtgcc 240
cgttctgcc aagcggcttc ctgcaggaga tggagaccgc ccgcggggcc gcgaccgacg 300
acggtgacgg cgacggcgcg gtggctcagg tgcaccccg cgccgaccgc ccgagctcca 360
tctgggcgca cgctatcctc agcacggtcg acagctccgc ccgtcgccgc cgca 414

<210> 5710

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-C9

<400> 5710

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cttctaattgc agatccaggc tgatttatta ggcagccctg ttgtcagacc agctgacata 180
gagaccacag ccctcggagc tgcatatgct gctgggttgg ctgcaggagt ttggaccaag 240
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gaggcgcaca ggaaaaagag ggcggattca tgggtacaagg cggtttcaag atcattcgat 360
ctggctgac tttctctgta aatttatact gccagcgctc ctctatctgg ttttggaagc 420
tgcaaatgaa taaat 435

<210> 5711

<211> 208

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D10

<400> 5711

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caagctgcgc ctagcctgtg taggtttgtg ctggtacatt gagagctctt atttatttgc 120
tttgattgca attaaccagg atgaccatag cccttgtttg gtttgctgtt tttataagtt 180

gcatgaacac aacttctgtt tggtaa

208

<210> 5712

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D11

<400> 5712

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caaaacgggt ggatagagat ccgcctcggt gatcagaggc cgtccatcgc ggaaccaacg 120

gtggatgctc cttcacgcgg ttttgaacac ttcagcccga cgaattgttc ggttcgtcga 180

cgacaacctc catttgttcc acaatccaca attccccacc cccacggcc cccggggcca 240

cccacctct cctcttctt cctcactcct ctctccctct ctctctctct ctctctctct 300

ctcgtcctgc gccacacgcc gcggccgtct ccgggcagga aggaaggggg cggaagatg 360

atgatgacc ggggcacgat ggggcccac 389

<210> 5713

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D12

<400> 5713

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tgatgataca gacaaagggc agtaccattg catcgattgt ggcatatgca gggttggtgg 120

caaggaaaac ttcttcact gtgtgaagtg tgggtcctgc tattctgtta tactccgtga 180

taaccatcag tgtgtggaga actcaatgag gcagaattgc ccaatctgtt atgagtatct 240

atttgactca ttacaaggaa caagagttct gaactgtgga cacacaatgc acttgacatg 300

ttttgaagaa atggtggcgc ataacaaata cacttgtcca atatgctcta aaacagctct 360

tgatttgaca catcattggg aatgttgga tcaagagatc gaagccacga tcatgcctcc 420

tgtgt 425

<210> 5714

<211> 439
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D2

<400> 5714

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cgctggacgt ggtcaagtcg cggctccagg cgcagggcgc ggcgtcggcg ccaggtacc 180
gcggcgctgt cgactgcttc cagaggagcg tccgggagga aggcctcccc gtgctgtggc 240
gcggcctcgg caccgcccgc gcccgcgctg tcgtcgtcaa cggcgccatc ttctccgcct 300
acgagctggc cctgcgcttc attgccagcg gcggcgcccc caggctggtc atggaggaca 360
agtgagtcag actggacat gttgtacata ggctagtata agtatccatt ccagtggttg 420
gtggagagta ccatgccac 439
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<210> 5715
 <211> 458
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D3

<400> 5715

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tgaccgtgac ggcgcccggg gacagcccca acacggatgg catccacatg ggcgactcat 180
ccgggatcac catcaccaac accgtcattg gcgtcggcga cgactgcac tccatcggcc 240
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tcggaagcct agggcggtac aaggacgaga aggacgtcac ggacatcaac gtcaaggatt 360
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tgctcacgt ctcaaagatt cactaccaga atatcaag 458
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<210> 5716
 <211> 426
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D4

<400> 5716

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cgagggccac cacctgacct ccgctgccat agtcggccac gacggcgccg tttgggcca 180
gagcaccgca tttccacagt tcaagacaga ggagatgacc aacatcatga aggacttcga 240
cgagcccggg ttcttgccc cgaccggcct ctctctcgcc cccaccaagt acatggatcat 300
ccaaggcgag cccggcgctg tcatccgcgg gaagaaggga tctggaggca taactgtgaa 360
gaagacaggg caagcgatgg tggtcggcat ctacgacgag cccatgaccc ccggccagtg 420
caacat 426

<210> 5717

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D5

<400> 5717

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gcctggcggg cgcgtggtac acgacaacca cggaagttc acggccgggc cgtggaaacc 180
tgccacgag accttctacg gcggcgaggga cgggtccggc accacggcgg gcgcgtgagg 240
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gtttggcgat ggcgcggcct gcggcgagggt ctacgaggtg cgggtgcgtgg acagccccag 360
cgggtgcaag cccgacgcgg cggcgctggg ggtgacggcg accgacctgt gcccggcc 418

<210> 5718

<211> 455

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D6

<400> 5718

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ttttatgcc aagcggttttc ttttgttata ggcgacaaga attgcacggc tgtacacaca 120

aaagcaaaca gcacgcagtg aatagcagcg tacgtacaga taccgtgcta gctagctcaa 180

acgaagatta ttgccgctg ctgctgtgct gtgcctcagc tcgtcagcta gcttctcttc 240

tgcgattctc cgctactacg tataccgtcc cccgtgcagc cgcgcgccgc gtatgtagtg 300

gcggctggcg tgcggtcctt tgcgcgattc gatcgacctg ccgcctggac tggatcacgt 360

gtttgtgggt cagcacgca cgcgtgtcgt ttcgattact tgtaccgcct ggagctggag 420

ctggctttgc tgctgttggt gtaccgggtg tcgtc 455

<210> 5719

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D7

<400> 5719

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aagggcatca ccgcgccga gatgaagggtg tgccaagagg cgtgcgacaa ggactacgtg 120

gtcaaggcgg ctgaggtcac caaggcctgc aacaccacct gcgccaagga gaagcagcct 180

ctgctcagcg agaactgcag gaggtcctgc acccctcttc cttcctgaac gcagagcacg 240

ccgcgcggtc gtgctcttct gctgcttgc gtgacactga atcact cctcctacat 300

gcatgcatgg gatgcgatga cgatttgatg catgcatgca tgggtatacc taccaatttg 360

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tgtaacgtca c 431

<210> 5720

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-D8

<400> 5720

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ttcagcacct ccgacctgac gctgtacgtc aagctcaacg cctccgtgcg cgccgagAAC 420
cccaacgaga tg 432

<210> 5721
<211> 407
<212> DNA
<213> Zea mays
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<400> 5721

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acaagcgcg cgggtcctac tacaccaact gcggggcgca gacggccgcc aaccctacc 240
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ggccggcggt ctgatctgcc tgctggctcg ctgggcaggg ggcacgcagc tggcctggct 360
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<210> 5722
<211> 431
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-061-Q1-E1-E1
<400> 5722

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ccgtgctggg cgctccgtg ctctccttct tcgcctacta cctgcagtaa aattaaagga 360
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<210> 5723

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-E10

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<210> 5724

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-E11

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tctc 424

<210> 5725
<211> 349
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-E12

<400> 5725

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ggggtgggcg ctggacctca ccgaggcgca ggccaagcca ttcgtcggca cacactacgt 180
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<210> 5726
<211> 387
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB148-061-Q1-E1-E2

<400> 5726

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387

<210> 5727

<211> 351

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-E5

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tggcacgaat gggatggacc tgatggtgtg caaggagtcc tgcgacctct cacagcgctc 300
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<210> 5728

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-E6

<400> 5728

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ttcaacatgg tgacgatcac caacgtgggc ggcgccggcg acatcgcggc agtgtcgggtg 360
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<210> 5729

<211> 317

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-E7

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tatatttgtg ccttcagttt cctgttgggt ggagtgttct tgtcgttttg cacggcacac 240
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ttgtggtgat gcaaaaa 317

<210> 5730

<211> 357

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-E8

<400> 5730

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cgcatctaata gcaacaacag acacgcagac taaaaaaca cagtgtcata ctaccatcca 180
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gtcgtgacca cagccctctc cggcgccaat atgatcgaca tcaactgaaa acagcaagca 300
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<210> 5731

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-E9

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 ggccggcgcc aggaacgacc acgctgccc cgctggcgcc gtgcacgacc cggacagcca 300
 ggaggaggag ggctccagcg tcaccatcga cgcgcccgc gccgcgccc acgacgtcgg 360
 ccacgacgac ggcagcgact acaacgaccc cgacgtgccc aacaacga 408

<210> 5732
 <211> 444
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB148-061-Q1-E1-F10
 <400> 5732

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 ctgtcgtecc tctctctcgt cgtggccgcc ctctcgggcg gcgcgcggcg gcagcaggtg 120
 ccgcgggtgg gcggcagcgc tctgaagccg gactactaca gccagtcgtg cccgcgcgcg 180
 gagaggatca tcgcggaggt gatgcagacg aagcagatgg cgaacccgac gacggccgcg 240
 ggcatgctgc gcgtcttctt ccacgactgc ttcgtcaccg ggtgcgacgc gtcggtgctg 300
 atcgcgtcca ccagttcca gaagtcggag cagcagcgg agatcaacca ctcgctcccc 360
 ggggacgcct tcgacgccgt ggtgcgcgcc aagctggccc tggagctgga gtgccccggg 420
 gtggtgtcct gcgcgcacat cctc 444

<210> 5733
 <211> 418
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB148-061-Q1-E1-F11
 <400> 5733

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 gtccagtgca tcaatagatg agcatctgag ctatgaaggc ataagcagtg gccatgatat 120
 gcaaataatt ccacttgatg gggctgattc tggttttgaa gggcaccaga catcttacag 180
 agaaatacca gtggagcctc ctgagatgtt tcttgaggc ttaattgttc acatagtgcg 240
 gcaaagaaga agtctctttc ctcttttgaa atgctggagc atccaggaaa ctgaaccacc 300

atacaaaagct gtttttagcga aaagggagaa cttcanggat atagtgggta ctccttacat 360
gtttacagat cacttaccat ggaggtgccca ctttgetatg cagaagattg ttgaagct 418

<210> 5734
<211> 394
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB148-061-Q1-E1-F12

<400> 5734

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ttgttgacac tgctgcacca atagaatctg ttaaagaggc tgtaagcaaa tttggaggca 120
ttcttgactg gaaagagaga cgtaagaatg tccagaatga gcttgataag gcattggaag 180
atgctcctag gtacaaaaga agagcggaag ctgcagaagc tgagaaaagc aaagttgtca 240
tggaattgtg taccactagg agaaccattg aagggttgaa gctaaatcta gagaagacac 300
aaattgaggc aatacaagca caacaagact cggagcttgc tgacatacgg ttcaaagaga 360
ttcaacaagg aattgcatgt anagagagtg ctgc 394

<210> 5735
<211> 430
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-F2

<400> 5735

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aaactaataa aactctcgcc gccgccatcc gagcgaacaa gccaacgcac cccgtcccca 120
aggcaatccg ccgccgacgt accaccacca ccgcaggagc gagatggaga tgaagaggat 180
cctcttcgcc gtctctgctg tcatcgccgc ctccggccacc gcagtgctgg cctccaccga 240
ggccgccgcc gcgggcgccc caactgcctc cgagtcgtcc gccgaggctc ccgctggcgc 300
tggcgctggc gctgccgctg gcgccgccgc cgcggggccc tccgccagca gcggcgcgcc 360
cgccctcgcc gccgcgccc ccgcgctcct cttctccctc ctgcctact acctccacta 420

agcgtgtgcg 430

<210> 5736
<211> 61
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-F3

<400> 5736

cacgcgtccg aacagccgta tcatggatc acccgagaa ctcttgagc gaaccgtcg 60

g 61

<210> 5737
<211> 428
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-F4

<400> 5737

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taaggaaagg tcccgccctt ttctccgac atccacaagg ggggaaggga aaacacgtac 120

attcaaccgg cggcaataat ggctcgggt cgggtccgg cgacgacgac cgccgccgtc 180

atcctatgcc tatgctcgt cctctcctgt gccggggtg acgaccgaa cctccccgac 240

tacgtcatcc agggccgct gtactgcgac acctgccgg ccgggttcgt gaccaacgtc 300

accgagtaca tcgcgggcgc caaggtgagg ctggagtgc agcacttcgg caccggcaag 360

ctcgagcgcg ccatcgacgg ggtcaccgac ggcaccggca cctacacgat cgagctcaag 420

gacagcca 428

<210> 5738
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-F5

<400> 5738

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ccacgcgtcc gggctgtgca ggaggcattg gcatcggcgt gcggcggcac tgggaagcag 120
acaatcctca tacccaaggg tgacttcctt gtcggacaac tcaacttcac aggcccttgc 180
aagggcgacg tgaccatcca ggtggatggc aatctgctgg cgaccacgga cctaagccag 240
tacaaggacc atggtaattg gatcgagatt ctacgcgtgg ataacctggc catcacggc 300
aagggaaacc ttgacgggca gggcccagcc gtgtggagca agaactcctg caccaagaag 360
tacgactgca agatccttcc caactcgtg gtgatggact tcgtgaacaa cggggaagtg 420
tccggggtc 429

<210> 5739
<211> 423
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB148-061-Q1-E1-F6
<400> 5739

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gtcctcgtgg ccacggccat agccgccgct cccggcgctt ggtttgtcgt caccggccgc 120
atctactgcg acaactgccg cgccgggttc gagacaaacg tgtcccacgc catccaaggc 180
gcgacggtgg agatggagtg ccgccacttc gagtcgcagc aggtccacga caaggcggag 240
gcgacgacgg gccccggcgg ctggtacagg atggagatca gcggcgacca ccaggacgag 300
atctgcgacg tgcgcctgct caagagcccc gagggcgact gcgccgagat cgaccactcc 360
cgcgaccgct gccgcgtcnc gtcacccgc aacgacggca tcaagcagag cggcgtccgc 420
tac 423

<210> 5740
<211> 388
<212> DNA
<213> Zea mays
<223> Clone ID: LIB148-061-Q1-E1-F7
<400> 5740

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caacagccag ctgcgaaaaa taatgaagag ccgcagcatg gcatcatcgg ccgcgtcttt 120

ggtgctagcc ctgcgctag tggcgggccac cgccccacag gtagcggagg caaagaagaa 180
 gagagcggcg gagagcggcg aggcggcgga ggcgaagaag atccaggacg acttctgctc 240
 gacgctgtgc gagggcaaga aggggacgga cctggctgtg tgcaaggagt cctgcgcgct 300
 ctcccagcag tccaacctgg tgctgtacgg caggatccag tgcaagggca aatgcaccga 360
 gcagaagggc atcacggcgc cgggcatg 388

<210> 5741
 <211> 435
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-F8

<400> 5741

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 cattgtgtcc accgatatgg cacaggcaag ggaatgcgag aagtacagtg agcgatttgt 180
 tggggcatgc atgatcgcag acaactgcgc caatgtgtgc cgcggtgagg gcttcttggc 240
 cggcaggtgc agcaccttcc gccgccgtg catctgcact aggcagtgtt aaacaagatc 300
 gctcgatcgc ttgccatgca tcgacaacct attcttaata acgttcatta tctcgttctt 360
 atttatgacg aatgtcatgt atgttcttgt gactgtcatg tatattctga tgactgtcat 420
 gtatcttggt catgt 435

<210> 5742
 <211> 440
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-F9

<400> 5742

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 gtgatcgtgg ggatcagtc tctctgtgg gcttctgctc tcattcttct ctctctcaac 120
 gtcaatggat ggcacacat gctctggatc tccatcatgc cgggtggtgat catcctgtcg 180
 gtggggacga agctgcaggg catcatctgc cgcattggca tcgacatcac ggagcgccac 240

gccgtcatcc agggcatccc gatggtgcaa gtcagcgact cctacttctg gttcgcacgc 300
 cccaccttcg tgctcttctc catccacttc accctcttcc agaatggctt ccagatcatc 360
 tacttctctt ggattctgta tgagtacggc atggactcgt gcttcaacga ctccgaagaa 420
 ttcgtctttg cagcactctg 440

<210> 5743
 <211> 380
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-G1

<400> 5743

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 catcgtacat ggggacgaac gaacattcaa tggggatcta tgcaacacgc tcctagcctg 120
 gtgcgtcctt ctaaatacacc aaatggggcg cctccggtat tggtaataata gacatcaaga 180
 aggctgttca agatgtatgg gcatcggcat gagacggtagc tggtaagcag acaatcgtca 240
 gacttacggg tgacttctct gtctgacagg tcaacttcac aggcccttgc atgggggacg 300
 tgacgatcca gctggatgtc aaactgctga cgaccacggc cgtactccat tacaaggacc 360
 ataggatatg gatcaagatt 380

<210> 5744
 <211> 460
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-G10

<400> 5744

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 tgttgggaatt attgtttatc gtggcctgta tttcggactt tacgattcta tcaagccagt 120
 tgtctcact ggcagcctcc aggacaactt ctttgccagt tttgctctgg gttggctgat 180
 caccaacggg gctggctctg catcttacct cattgatact gtccgcagaa ggatgatgat 240
 gacttctggg gaggtgtca agtacaagag ctcatggac gcattccagc agatccttaa 300
 gaaggaaggc cccaagtccc tgttcaaggg tgctggtgct aacattcttc gtgccattgc 360

tggcgctggt gtgctttctg gctacgacca gctccagatc ctcttcttcg gaaagaagta 420
 cggctccggg ggtgcttaaa tggagaaaaa tgatgacgaa 460

<210> 5745
 <211> 431
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB148-061-Q1-E1-G11

<400> 5745

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 gcggccgtgc tgaccacggt gcccggcgtc gcgctcgcca agtcgaagct cgccaagaag 120
 agcgacgacg tcgtgaacgg gccctcctg accgagaaga tccaggcgaa gaagacgctg 180
 atcgtggggc cggacgagga gttcaagacc gtgcagtcgc ccatcgacgc ggtgcccgcc 240
 ggcaacgccg agtgggtcat cgtccacctc cgctctggcc tgcacagggg caaagttgtg 300
 ataccggaga acaagccctt catcttcgtg aggggcaacg gcaaaggccg gacctccatc 360
 tcccacgagt ccgcctcttc cgacaacgcc gagtcgcgcg cgttcaccgt gaactcggac 420
 aacgtcatcg t 431

<210> 5746
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-H11

<400> 5746

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 ttctgccgac ccagttgatt cccgacgaca acgaaggaaa ggtgctgcgt gttaagctca 120
 tcatgaaaga aggggtgaag aacttcaacc cggtttatct ctttgacgaa ggatcgacca 180
 tcagctgggt gccttgtgga agaaagctca catgctctta ccctggcatc aaattttcct 240
 atggcccga cacttacttc ggaaacgagg tatctgttct ggagatggat gggcaattcg 300
 acagactaga tgagctcatc tacgtggaga gccatctaag caacctttca accaagttct 360
 acggagaggt gacacaacaa atgctaaagc atgcagactt cccaggtagc aacaacggga 420

<210> 5747
 <211> 396
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-006-Q1-E1-A5
 <400> 5747

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 cttcaaccgc gtttatctct ttgacgaagg atcgaccatc agctgggtgc cttgtggaag 120
 aaagctcaca tgctcttacc ctggcatcaa attttcctat ggcccggaca cttacttcgg 180
 aaacgaggta tctgttctgg agatggatgg gcaattcgac agactagatg agctcatcta 240
 cgtggagagc catctaagca acctttcaac caagttctac ggagaggtga cacaacaaat 300
 gctaaagcat gcagacttcc caggtagcaa caacgggaca ggtctcttcc agaccatcat 360
 tggactgaag attagagacc tctatgaaca gattgt 396

<210> 5748
 <211> 397
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-018-Q1-E1-G1
 <400> 5748

gatgctctgc gtccagtgc tgatcttccg ttggatgtac atctgatgat tgtggaacct 60
 gagcagcgag tccctgattt tatcaaggca ggtgctgata ttgttagtgt ccaactgtgaa 120
 cagacatcga ccatccattt gcaccgaaca gtcaatcaga ttaaaagtct aggagcaaag 180
 gcaggagttg ttttgaatcc agcgactcca ctcaactgaa ttgattacgt tcttgatggt 240
 gttgacctgg tgctgattat gtctgtgaat cctgggtttg gtggccagag ctttatcgag 300
 agtcaagtaa agaaaattgc agaactgaga aggttatgtg cagagaaggg agtgaacccc 360
 tggattgagg ttgatggtgg tggtggtccg aaaaatg 397

<210> 5749
 <211> 416

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-031-Q1-E1-D1

 <400> 5749

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 aacaagccaa acaaccaggt ggctgctagc cgagacaggg gatagattga gagagagggc 120
 cgcagatggc gacgccgtcg tcgtcgcttt gctccagctt cgctccctg cggaccgcct 180
 ccatcggccca ccccggtggc atcgctcct ccacgctcag gaaggcattc catgtgaggg 240
 catcagctcg ggttgacaag ttctcaaaga gtgacatcat cgtgtccctc tcgattctgt 300
 ctgcaaaactt tgcgaagctt ggtgatcagg taaaagctgt ggaggtggca ggatgcgact 360
 ggattcatgt cgatgtcatg gacgggcgct ttgtgccaaa catcacaatt ggaccc 416

<210> 5750
 <211> 406
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-032-Q1-E1-B6

 <400> 5750

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 ggctcgagcg agggggggcg gaggcgagat ggaccacgcg gcggacgcgc accggacgga 120
 cctgatgacc atcacgcggc acgtgctgaa cgagcagagc cggaaccccg agtcccgcgg 180
 cgacttcacc atcctgctct cccacatcgt cctcggctgc aagtctgtcg cctccgccgt 240
 caacaaggcc gggctcgccc agtcatcgg gctcgccggc gagaccaacg tgcagggaga 300
 ggagcagaag aagctggacg tcctgtccaa cgaggtgttc gtcaaggccc tcgtcagcag 360
 cggtcgcacc tgcgtccttg tgtccganga ggacgaggaa gcaacg 406

<210> 5751
 <211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-C10

<400> 5751

acctaagaag gggaagatct attcagtcaa cgaagggaac gccagaact gggacgcgcc 60

tgttgccaag tttgtggaga agtgcaagta ccccaaagat ggctcgccac caagatcttt 120

gagatacatt ggaagtatgg ttgctgacgt gcaccgtacc ttgctatacg gcggtgtggt 180

tttgtaccct gctgacgaga agaaccctaaa cggaagctc cgtatcctgt acgaagtttt 240

ccccatgtcg ttcctaattgg agcaggcagg aggccagtc ttcacaggca aagaacgggc 300

tcttgatctg gtcccaacca agatccacga cagggtccccg atattcctcg gaagctacga 360

cgacgtggag gagatcaaag cgttgtagc cgagcaggcg aagtcgagct cggcttcac 420

ctaag 425

<210> 5752

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-H7

<400> 5752

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gctcccgcc aaggcgccga catcccgacc tatgtcgctg gcgtcaacga gggcgactac 120

gaccacagcg tcgcccacat catcagcaac gcgtcctgca cgaccaactg cctcgcgcca 180

ttcgtcaaga tcttgagca ggagttcgga atcgtgaagg ggaccatgac gacgacgcac 240

tcgtacaccg gcgaccagag gctgctggac gcgtcccacc gcgacctcg gcgggccccg 300

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ctgccgc 367

<210> 5753

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-D12

<400> 5753

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caagagcacc ttcattgcgcc ggctcaccag cgtcttcgggt ggcgcgcgcg agccgcccaa 120
 gggcggaac ccggactcca acacgctcat cagtgcacacc acgacagtga tatgcctcga 180
 cgactaccat tccctggaca ggaacggcag gaaggagaaa ggtgtgaccg cctcgcaccc 240
 tagggccaac aactttgatc tcatgtatga gcaggtgaag gcgatcaagg aaggccaggc 300
 agtcgagaag cccatctaca accatgtcac tggcctctc gaccctccgg agcttatcgc 360
 gccaccaaag attttcgtca ttgaaggctt gcacccaatg ttcgatgagc ga 412

<210> 5754

<211> 353

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-C6

<400> 5754

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 cacgcagctc tcgccgcctc ccgcattccc gccggcgccc ggctgcacag caggcgccg 120
 gcgtcgtcca ggcacggcgt gcagaggctg gacttcgccg acttctccgg gtcaggccg 180
 gggtcgtgct ccgtgagcgc tgcgcgcgcg gaggcgtcct tctccgacgt ccttggcgcg 240
 cagctcgtcg ccaaggccac cggggagAAC gccgtgaggg cgcgcgcaga ggcgaagctg 300
 aagggtggcga tcaacggctt cggccgcacg gcccggaact tctccggtg ctg 353

<210> 5755

<211> 374

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-015-Q1-E1-C5

<400> 5755

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 cgatcaacgg cttcgccgcg atcggccgga acttctccg gtgctggcac ggccgcgagg 180
 actcgccgat cgacgtcgtc gtcgtgaacg acagcggaag cgtcaggaac gcgtcncacc 240
 tctcaagta cgactcgatg ctcgccacct tcaaggccga cgtcaagatc gtggacgaca 300

cgaccatcag cgtcgacggc aagcccatca cggtcgtctc cagcagggac ccgctcaagc 360
tcccatgggg tgag 374

<210> 5756
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-D11

<400> 5756

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ggagattact ggcttcagt ctccggtaag agagcagatc tacaaggtag cttcagtgaa 120
cctgtgctcc aatatcactg gtcaaactct tgcgagcctc gtcataatc caccaaaggt 180
tggggacgaa tcatatgctt cctacaaggc agagaaagat ggaatccttc agtcttttagc 240
tcgccgtgca aaggcactgg aagatgcatt caacacgctt gagggatttt catgtaacaa 300
ggctgaagga gcaatgtacc ttttccctca gatccatctg ccacataagg caattgaggc 360
tgctaaagct gccaaagaa cacctgatgc attctatgcg ctccgtc 407

<210> 5757
<211> 379
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-018-Q1-E1-C10

<400> 5757

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tgcagatcga aggggtgatg tgaccca gaa ctggctagtg atgtgttgat ggc 180
ctctgggaac ggattaaaa gagcgaagct gaattgcttg ctgagaagaa c 240
catcttacag gagaggggaa tgcattttgt gatcttccg aagatac t gctaccagga 300
gaagtgtagt ttagttacag aagcaacagc agtggaatgc attttgcaa tacattagct 360
gagacttgan acatctgct 379

<210> 5758
 <211> 371
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-002-Q1-E1-B7

 <400> 5758

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 tgcttcgaga ctctgcagcg cttcacggcc gccacgctgg agcacggcat gcacccgccg 120
 gtctctccca agcccagatg gcgcaagctc atggacgaga tggcggtcgt ggccacggag 180
 gagtaccgct ccgtcgtcgt caaggaggcg cgcttcgtcg agtacttcag atcggctaca 240
 ccggagaccg agtacgggag gatgaacatc ggcagccggc cagccaagat gagggccggc 300
 ggcggcatca cgacctgcg cgccatcccc tggatcttct cgtggacca gaccaggttc 360
 cactccccgt g 371

<210> 5759
 <211> 435
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-009-Q1-E1-G7

 <400> 5759

acggacgcgt gggctggcta ggcggcttct cttcactcac ctgcagagtg caccgcaata 60
 atcagcttcc ggatggtggc gttttgtcag ttttggatgg aaatgccgaa ctggcagcgt 120
 ctgttttccc tatgcatatg taatttctg cctctttata ttcactcttg ttgtcaagtc 180
 caagtagttc gccgacgaga acaagcccg cggactggtc aagctgaacc cggcgagcga 240
 gtaccgccc ggctggaag acacgctcat cctcaccatg aagggcacg ccgccggcat 300
 gcagaacact ggctacgagg cttctcttca ctcacctgca gagtgcaccg caataatcag 360
 cttccggatg gtggcgatg gtcagttttg gatggaaatg ccgaactggc agcgtctgtg 420
 ttcctatgc atatg 435

<210> 5760
 <211> 412

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-031-Q1-E1-H11

 <400> 5760

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 gcttgtggcg gaagaactca agccctttgg gaagcagctc agggacaaat acgtggagac 120
 acagcagctt ctctccaga tcgctgggca caaggatatt cttgaaggcg atccattcct 180
 gaagcagggg ctggtgctgc gcaacccta catcaccacc ctgaacgtgt tccaggccta 240
 cacgctgaag cggataaggg accccaactt caaggtgacg cccagccgc cgctgtccaa 300
 ggagttcgcc gacgagaaca agcccgccgg actggtcaag ctgaaaccgg cgaaacaatt 360
 tcccccccg gcttgaaga cacgctcatc ctcaccatga agggcatcgc cg 412

<210> 5761
 <211> 370
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-B6

 <400> 5761

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 ccctgaacgt gttccaggcc tacacgctga agcggataag ggaccccaac ttcaaggtga 180
 cgccccagcc gccgctgtcc aaggagttcg ccgacgagaa caagcccgcg ggactgggtca 240
 agctgaaccc ggcgagcgag taccgccccg gcttgaaga cacgctcatc ctcaccatga 300
 agggcatcgc cgccggcatg cagaacactg gctacgcggc ttctcttcac tcacctgcag 360
 agtgcaccgc 370

<210> 5762
 <211> 394
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-F6

 <400> 5762

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aagcagctca gggacaaata cgtggagaca cagcagcttc tcctccagat cgctgggcac 120
aaggatattc ttgaaggcga tccattcctg aagcaggggc tgggtgctgcg caacccttac 180
atcaccaccc tgaacgtggt ccaggcctac acgctgaagc ggataaggga cccaacttc 240
aaggtgacgc ccagccgcc gctgtccaag gagttcgccg acgagaacaa gcccgccgga 300
ctggtcaagc tgaaccggc gagcgagtac ccgccggcc tggaagacac gtcctcctc 360
accatgaaag gcatcccgcc cggcatgcag aaca 394

<210> 5763

<211> 392

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-A11

<400> 5763

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ggacccaac ttcaaggtag cggccagcc gccgctgtcc aaggagttcg ccgacgagaa 120
caagccgcc ggactggtca agctgaacct ggcgagcgag taccgcccgc gcctggaaga 180
cacgctcatc ctaccatga agggcatcgc cggcgcatg cagaacactg gctaggcggc 240
ttctcttcac tcacctgcag agtgcaccgc aataatcagc ttccggatgg tggcgttttg 300
tcagttttgg atggaaatgc cgaactggca gcgtctgttt tccctatgca tatgtaattt 360
cctgcctctt tatattcact cttgtggtca ag 392

<210> 5764

<211> 337

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-H12

<400> 5764

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gcctgcaggg gtagaattca cgcgcttttg gagccaactc agggaccaat aagtcgagac 120
acagcagctt ctgggaata tcgcaggga gaacgatata ctatgaacgc gatgcattcc 180

tgaagcaggg gctggtgcag cgaaaccct atatcaccag cctgaacgtg ttccaggcct 240
acacgctgaa gcgataagg gacccaact tcaaggtgac gcccacccg ccgctgtcca 300
aggaattcgc cgacgagaac aagcccgcg gactggt 337

<210> 5765
<211> 390
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-020-Q1-E1-B11
<400> 5765

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cacgatggcg atctgcagcg cgcacactac cacctccctg cgctcccat gcacgaccgt 120
ctcgaacgca ggtctgaggc agaagcaagt catcttcgtc accagcaaca ggaggagcgg 180
cgccggcagg aggcacggag gggcaaggag cttccaggtc tcgtgctccg tcgacaagcc 240
ggtggtgatt ggctggcg cagactcagg gtgcggcaag agcaccttca tgcgccggt 300
caccagcgtc ttccgtggcg ccgaggagcc gcccaagggc gggaaccgg actccaacac 360
gctcatcagt gacaccacga cagtgatatg 390

<210> 5766
<211> 288
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-033-Q1-E1-F2
<400> 5766

aaccaaactg ccgcattcgt gttcgtcatg gccaccaacg tcaccgtgga aaacctcaac 60
cccaagggtct taaaatgtga gtatgcagtc cgtggggaga ttgtcatcca tgggcagcgc 120
ctgcagcaac aactacaaac acaggcaggg tctcttctt ttgatgagat cctctattgc 180
aacattggga atcccaatc tcttggtcag caacctgtga cattcttcaa ggaagtctt 240
gctctttgtt atcatccgtg cctcttgga aaagaggaaa ccacatca 288

<210> 5767
<211> 408

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-002-Q1-E1-F5

 <400> 5767

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 agatgcagaa gtacggcgcc accgggtggc tcgtcaacac cggctgggtct ggtggcaggt 120
 acggcgtggg caagaggatc aggttccct acaccagaaa gatcatcgac gccatccact 180
 ccggcgagct cctcaccgcc aactaccaga agaccgaggt gtttggcctg gagatcccca 240
 ctgagatcaa cggcgtgccg tcggaaatcc tcgacccgat caacacctgg acggacaagg 300
 ccgcgtacaa ggagaatctc ctgaggctcg gcgggtctt caagaagaac ttcgaagtgt 360
 tcgccagcta caagatcggg gacgacagca gcctgactga cgagatcc 408

<210> 5768
 <211> 364
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-029-Q1-E1-A4

 <400> 5768

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 tgaggccatg tcttcttca acgagaggcc tatcatcttt tcaactgtcaa acccaacctc 120
 gcattctgaa tgcaactgctg aacaagcata tacctggagt cagggccgtt caatctttgc 180
 cagtggcagt ccatttgccc ccgtggagta cgaaggaaag acttttgtgc ctgggcagtc 240
 gaacaatgcc tacattttcc ctggactcgg cctcgggtctt gtgatctctg gagccgtccg 300
 tgtccacgag gacatgcttc tcgccgcctc gaaagcgcta gctgatcagg ccacacagga 360
 caac 364

<210> 5769
 <211> 393
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-018-Q1-E1-D11

<400> 5769

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ctgtgttact gatggtgagc gaatcttggg acttggagat ttgggttgtc agggaatggg 120

aattcctgta ggcaaacttg ctctatacac tgctctagga ggagttgacc catcagtttg 180

cttgccatc acaattgatg ttggtacaaa taacgagaaa ctgcttaatg atgagttcta 240

cattggactc cggcaaaaac gtgcgactgg cgaggagtat gatgagctta ttgaagagtt 300

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caatcacaat gcctttgatt tgcttgaaaa ata 393

<210> 5770

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-D11

<400> 5770

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gctggaactg gtattgcaga acttattgct cttgagattt cgaaacagac gaatgctcca 120

attgaagagt gccgcaagaa ggtttggtg gtggactcaa agggtttgat tggtgactct 180

cgtaaaggct cccttcagcc attcaagaaa ccttggggcg atgagcacga gcccttgaaa 240

accttgatg atgctgttca gtccatcaaa cctacagttc tgatcgggac atctggagtt 300

ggaagaacat tcacaaaaga aatcattgag gccatgtctt ccttcaacga gaggcctatc 360

atcttttcac tgtcaaacc aacctcgcat tctgaatgca ctgctgaaca agcatata 418

<210> 5771

<211> 414

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-027-Q1-E1-C5

<400> 5771

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ttctgatcgg gacatctgga gttggaagaa cattcacaaa agaaatcatt gaggccatgt 120

cttccttcaa cgagaggcct atcatctttt cactgtcaaa cccaacctcg cattctgaat 180
gcactgctga acaagcatat acatggagtc agggccgttc aatctttgcc agtggcagtc 240
catttgcccc cgtggagtag gaaggaaaga cttttgtgcc tgggcagtcg aacaatgcct 300
acattttccc tggactcggc ctcggtcttg tgatctctgg agccgtccgt gtccacgagg 360
aaatgcntct tcgcggcttc aaaaccgcta cctgatcagg ccacacagga caac 414

<210> 5772

<211> 347

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-G7

<400> 5772

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ttgaagagtg ccgcaagaag gtttggctgg tggactcaaa gggtttgatt gttgactctc 120
gtaaaggctc ccttcagcca ttcaagaaac cttggggcgca tgagcacgag cccttgaaaa 180
ccttgtatga tgctgttcag tccatcaaac ctacagttct gatcgggaca tctggagttg 240
gaagaacatt cacaaaagaa atcattgagg ccatgtcttc cttcaacgag aggcctatca 300
tcttttcact gtcaaaccce acctcgcatt ctgaatgcac tgctgaa 347

<210> 5773

<211> 398

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-G9

<400> 5773

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cattcccgtc tatcttgctc agggcatcct ccaacatgac cccttcgagg tcctggacca 120
gaggggagtg ggcgagctgg tgaagtttgc tacagagagg ggccgcaaag ctaggcctaa 180
cttgaagggtg ggcatttgtg gagaacacgg tggagagcct tcgtctgtgg cttctctcgc 240
gaaggctggg ctggattacg tttcttgctc ccctttcagg gttccgattg ctaggctagc 300
tgcagctcag gtgcttgtct gaggtgcct cctcgttggc aaccggattg cctgctgctg 360

gtggatgtgg tgatcaacag tattattaca gagccatg 398

<210> 5774
 <211> 407
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-E8
 <400> 5774

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 ggtgttcttt ttggatccaa agagtttata agcagggcga tttacgacac tgtgcagaag 120
 gctggcaatg ttggacatgt actgaacctt ggccatggca tcaaggttgg aactccggag 180
 gaaaatgttg ctcaacttctt cgaggtcgca aaagggatca gataactaaag aaccttgcac 240
 gggtctttcc tttctccaaa tcggcagaag ttgtagagtc ggcggtcgag gatagatgca 300
 gaaagccatg tgcagtatag agtccctgaa aacatttttg tgactgattc tgtctgtcgc 360
 aattcaagtt ccggtttcaa tgtgatattg taagcagatt tgagacg 407

<210> 5775
 <211> 398
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-014-Q1-E1-E6
 <400> 5775

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 actcacacct cactttttct gctaaattgt ggcagtgggtg ataattgata tgcatagact 120
 gtacttattt aatgactatg aaataccatt taacatagct attgtgcctg acagggtaaa 180
 tctaccaagg acacacatag ttaagccttg ctcaagctgac gactgctaag gaatttctgt 240
 taagtgcagt ttgggggggtc ttctcaacca ttgcttgact taaggcaaca cattagagga 300
 tattcatcag catcagaggc aattcttccc aatctgattt gagaaaaaaa tttgttggca 360
 acgaaaaatt agtggtttct tgctgaatct tgggggggc 398

<210> 5776
 <211> 418

<212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-H8

<400> 5776

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 gttggtcgca gcaacatcgt cgggctacct gttaggggtgc tccttctgaa ggcagatgcg 180
 accgtatctg ttgtgcactc gcggaccctt gatcctgaaa gcattgtacg cgaagctgac 240
 atagtcacg cggcagctgg gcaggctatg atgatcaaag gtgactggat caagccaggt 300
 gctgcgggtca tcgatgtctt tactaactcc atcgatgacc ctaccggaa gtccgggtac 360
 cggctcgtcg gcgatgtgga tttcgcatcg gcgagcaatg ttgctgggta cctgactc 418

<210> 5777
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-H7

<400> 5777

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 cgagcgatca tcaggagagt tcaggtcgtg caagaggggc gggtgaaaca aaacgcacg 180
 atccatccgt cggtcgcca atcatgattc tgggcttggg aggatgctgc ggagctgccg 240
 ccgccgccgc cgccgtgtcg ccggctgccg tcggcaagca attgcgaggc catctacagg 300
 ccaactgagcg gcagcagttt tttttttggg caagtgatga gcacaagatg aacaaggag 360
 gcgagcaggg agcggcggca gcagctgggg gtaaggag 398

<210> 5778
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-G5

<400> 5778

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gggggaggcg ctctccaccg ccgccaatcc cagggggggc taccgggtccc gcgcttcgct 180
gggcaatccc gtgaacgggc ttggcctcag catgggcccgc gagcgcccc agctgagcat 240
tgtgtgccag acggcgagca ccatctccgc ccaccgcctc tctcacatgg acaatccgaa 300
gctgatgaac ctctccttc tcttttcat ctctttccc accgtccgca ttgtctccc 360
ccatggcgcc ttcttctcc ctgcggctc ccggaacc 398

<210> 5779
<211> 448
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-G6

<400> 5779

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ctgtacaaca agaagaacga gtgggagaag atgcagctgg ggaagaccgc cgtcgccggg 120
gtgggagcca ccaaggagga ggcatggac agggggagct cgcacacgca ctcccacgcc 180
caatcacact cgcactcgtg gggcgagacg cgcacgccag agtcggagat cgtggacaac 240
gacccgttcc cggagctgga ctcttcccgc gcgttccagg acccggcgat gatgatgacg 300
gtgcccaagg aggatcattt tttttgctgc agcgccaaga gcggcaacct gtctgtggac 360
ctcagctacg acgacatcca cggcatgtac agcggcctcg acatgccgcc gccgccccgg 420
gaggacttct acccctcgct cctccggt 448

<210> 5780
<211> 351
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-G7

<400> 5780

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acaacaactc aattcctatc gaattccttc ctatcgaatt cctatagtaa aattcctata 120

ggaggggaacg tacacacggt gtacacatta taggggggtga aacatattca ttaacttaag 180
catactcctt tttttattta atgagttgat attaattaaa tatctttttt tttagatttt 240
tgcaaagggtt tcatttacgc ctaatccata tcgagtagac cctgtcgttg tgagaattct 300
taattcatga tttgtttttt tttacttatg tcaccacaca cataaactaa a 351

<210> 5781

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-G8

<400> 5781

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gcgtggtcga gcggatggaa gccacaaaga agatgtgggt ataggctcct gttaacaatt 180
tcatgttgct gctgcttaat gtttcgggta tagactccag ctaacaactg cctgatgctg 240
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ttttttttca ccatcttggtg ttataatcta aatgctgttg taacttgcaa gtggatgcct 360
agccttgctc ttgctgatat aacttggcag cattcactca gttaatc 407

<210> 5782

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-G9

<400> 5782

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acctggaggc cgtgggctct gacttcacgg gcggcgccaa cttegccatc tccggctcct 120
ccacgcggcc ccgcaacgct ccttccgcgc tccacgtggg ggtccagcag ttctgcacc 180
tgaagcagcg ctgcctcgac ctgcgccccc acggcgggac ggctcccgtc gacgccgacg 240
gcttccggaa cgcgctctac ctcatcgaca tcggccagaa cgacctgtcc gccgcattcg 300
gtagcggagc gccctacgac tacttctttt atcataggat cccggctatc gtgtcagaca 360

taaaggacgc tatcatggta cctctgcaaa tagtatcact caccatagat tagaacttcc 420
aactacggcc ttgtc 435

<210> 5783
<211> 413
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-H1

<400> 5783

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ggcatcggcc ccaacgccag cggcaccgca ccaccacgcc cgtcggcgac atgaatccgc 120
ccgcgggagc cgcgtccacc ggcgcaggag gccaggccgg ggcgcctgcg gcagcccggg 180
agtacgtgca ctaccgagg ctctcgccag aggaggtggc cccgcccccg cccccgcctt 240
atcacgccgc caccgcgcgc cgcgtccgcct acggaggcaa cccctacatc tactcccccg 300
ccggcggcgc cgccacctcc ttttttttat atgatggact ccgtgaagga cgtgctcggc 360
aagatgggga agaggtttgg ccaggccgcc cgcaagaccg agaccatcac cgg 413

<210> 5784
<211> 389
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-H10

<400> 5784

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tggggcggaa tgccggcgctg ctgcgctga tccagggggg ggagcgggag atcgtgcccg 180
agcgggagag gcttgagggt atcctggagg acgtgggcat caacgacccc gccagctgca 240
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cgtcgatgat cgccctcgtc cgttttttct gctacgcaa gtgcgtcctc ttcagtgcgc 360
ccacgccgcg gcccgtagac tccaaggtg 389

<210> 5785
<211> 409
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-H12

<400> 5785

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agcaacaatg gcgaccaaga tattttccct ccttatgctc cttgctcttt ctacatgtgt   120
tgctaaggcg acaattttcc ctcaatgctc acaagctcgg agagcttccc ttcttcccc   180
ataccttcca tcaattatag cttcaatatg tgaaaaccca gctcttcaac catataggct   240
tcaacaagca atcgcagcaa gcaacatacc tttatcgccc ttgttgtttc aacaatcgcc   300
agccctatct ttggtgcagt cattgtttat taccatcagg gcacaacagc tgcagcaact   360
cgtgctacct ctgattaacc aagttaactc tgggaaacct tttctcct                409
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<210> 5786
<211> 403
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-034-Q1-E1-H2

<400> 5786

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cgagggctta ngtccttttc ggctgctggg aggggggatgc atgcaattga gctggagaaa   180
agggcaatac atctcctaata ggaggaaggg aaagagctcc agcgaatgaa ggctttgaat   240
gttcttgga aggtttcccc aaatgcttcg tcaaagctga caccttcgca gcggtagtct   300
ctacaatgag atgactgttt attatcacga gggctgtaat actcaaatac attgcagaaa   360
agacatgttt ttcctgtgtt acacctttcc ttttaattcc ttt                403
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<210> 5787
<211> 409
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-H3

<400> 5787

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gggaggactg cctaatacatt tcaaagtaac tggggggggag acttatccta acatcagaca 180
tgagccaaat cttcaaggty ctgttatcac gggtatatct gatcaaaata ctgttgactc 240
tatcagccac agtcaaaatc ccacctccac caacttggtg cccgacgtct tagacaaagc 300
taccatccat gaattcgttt tttttcagca cattaccgat cgaaagcatt atgctataca 360
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<210> 5788

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-H4

<400> 5788

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tcctacgtcg gcgacggggt ggggctgctg atcccgcca agtggaacct cagcaaggag 180
cgggagttcc ccgggcaggt gctccgctac gacgacaact tcgacgcca caccaacgtg 240
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ttcttctctt atgtcgacta cctgctcgc aaccacgcct acggcggcaa caccgactcc 360
cagggcgggt tccagaccga cgccctggcc accccaacc ttctggagag ctccaccccc 420
cttg 424

<210> 5789

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-H5

<400> 5789

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 gtgagtgtgg actttgtcac atctgatatc aggggtggga aatctttatc cgagatggcg 180
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 atgattacca agatagaagg ccgtggtaat ggtatcaaga caaatgttgt gaacatggtt 300
 gacatagcaa aagcacttgt tatttttagc ttctacaca accaagtact ttggatgtga 360
 gcttgggtgca cagtccaaat ttgatgagaa gacaaggatt tccttgggta atggggctca 420
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<210> 5790
 <211> 343
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-034-Q1-E1-H6
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 ggagcggggc ttaccgtctg tctgaaacca caggcgggga tacatcacia gccacaggc 180
 gctttatttg ccacgtaga ccaaacttct agtgctgcct acatcaccac catgcacaca 240
 ttgactccag ccttattcac agctgtcggc ctcacgaccc ctccaagttg tacaataaga 300
 tccacaacac cttatttttt ttttctctca cgtaccctac gta 343

<210> 5791
 <211> 355
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-034-Q1-E1-G3
 <400> 5791

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 gtgcgctaca caaagatcac ttccaacatg aatgaacgct ttccaggggg gacatcacia 120
 aagctcgatg tgaatgaggg ggggggtatta tttgcctga ggaaatggct acagcaaaga 180

aactgctcga tgggcatctg ttccatgtgc attgtctaag acaaacagga gaacaggctg 240
aacaagacgt tctctacgg cttctccatg ggagcttcac ctccacagga acgattctct 300
ctttttttta tgtcccgtgc tgcattgccc aacgtgcaat ggattattgta tacta 355

<210> 5792
<211> 154
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-034-Q1-E1-E12
<400> 5792

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cgaaccctcg cgtcttcttc gacatcaccc tggcgggcgc cccggcgggc cggatcctca 120
tggaggggta cccaaccac gtgccaaga ccgc 154

<210> 5793
<211> 407
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-034-Q1-E1-E2
<400> 5793

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gggcgtggcc atcaaggact acccctacgc ccacgggggg ctctgtgtct gggactccat 180
caagcagtgg gcgtccgagt acgtcaacgt ctactacaag tccgacgagg ccgtggccgc 240
cgaccccag ctgagggcgt tctgggacga ggtgcgcaac gtggggcacg gcgacaagaa 300
ggacgagccg tgggtggcct tgtcttttac ccgcgacagc ctggtggaga cgctgaccac 360
catcatgtgg gtcacctccg gccaccactc ggccgtcaac ttcgggc 407

<210> 5794
<211> 378
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-034-Q1-E1-E4

<400> 5794

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ccatgacggt accgagatcg tgctctggaa ctcgctgcgag ggcgacaacc acccctggaa 300
gatcctccct tgggtgtattt tcttttgata ctactacctg gtaccctact cataattctg 360
ccggctgctg cgatcccc 378

<210> 5795

<211> 275

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-E5

<400> 5795

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caagggattg ctaatttgat aatgacagcc aaacggagtg ttaagaagtc agacgatggg 120
gtgcctgttc cacctcttct caaaacttcg gcgggggtggg gtgcattcct tgctgtttct 180
tccaacacac ggtaccacat tattaatgga ttacagcccc tggttgacgc ttcacctgtt 240
gccaaagcgtg tcccggtgc ctctttggca ttcac 275

<210> 5796

<211> 305

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-E7

<400> 5796

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gaggacatca acacctgcac cggctacgtc caccagcgca tggagagctt cctcgccagg 120
gcgtgggtgat ccgccctgcg gccggcatct aggggggttc gtgcttgctt gcttgcttta 180
tgtatgtctg tggttgactg gttgttcacg gtcacccctac ttggctatct tacctgcacg 240

cactcatctc ctgtacgaat tacgaccata agctcgttac ctgaataaaa cttcttcgta 300

ctact 305

<210> 5797

<211> 289

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-E8

<400> 5797

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ttcactagaa gacggcgggg gcgtatcgtc atcattggta cccttactgg tgctcactgg 180

ggaatttacc atgcattcaa actcatcgtt tgactcccaa caactggagg tgttacacct 240

gccccatcag catacgtga attcaaagcc actccttgat ttttttttc 289

<210> 5798

<211> 354

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-E9

<400> 5798

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gcacgcgccg tcaagtcct tgcgcggcat tctgtccat ccgcttaggt ggcgcgacgg 120

cgacgggggt cgctggactg gcggtggcct ctacgcggag cggagcgtcg cgccgctgcg 180

atggtcgcta tggcgaacag ggagcacgag ctggaggaga tccggggccat gaccactgaa 240

cacatgtaag atgaggtggt agacctcaag ggggagcttt tctgtctccg ccttaaccgc 300

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<210> 5799

<211> 118

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-F1

<400> 5799

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gccatctccg tgcaçgtcaa ctactgcggc aagcacgtgc cctccagctt ccactgcc 118

<210> 5800

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-F10

<400> 5800

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gaatcacatg tccaaatgca aatctaaaaa ggaaacaatg gcagaagatg attgtacaaa 120
catggggagt gcaacaaatg ctgaaactgc tgatttgggg agctcaatat ccagaaacac 180
agaaggccaa caagcagtag aagccgttga cgcaccacat ggcccttcca aaatggctaa 240
tggaatgat aagaatcatg attctcatat cgaagtgaca ccccatgagt tgggtttgaa 300
gagatcgaga acaaattggag ctattttttt tatccatgat gagcgaaata ttcttaaaag 360
atcagatcaa tcagccttca ccaggttaca tacatctgtg gcttccaatc 410

<210> 5801

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-F12

<400> 5801

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ccggctaccc agacatcgct cgtgcgctcg ccaagagaca ggaccggaga ccatggcgga 120
ccagcggagc gacgaccaga tcgccgagtt caaggagggg gtcagcctct tcgacaagga 180
cggcgacggt tgcattacaa ccaaggagct cggaactgtc atgcgatcac tgggtcagaa 240
cccaaccgag gctgagctcc aggacatgat caacgacgtc gatgctgacg gcaacggcac 300
catcgacttc ccggagttcc tcaatcttat tgtccgcacg atgaaggaca ccgactccc 359

<210> 5802

<211> 315
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-034-Q1-E1-F2

 <400> 5802

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 caaagggggc tcttggaaca gccagcaaaa taacgggggg catagcatat ccaacgaaca 180
 gcggccaaat taccactatt ataaactatc catggtgcac agcatccgaa caattaattc 240
 cccacagctc aaaaaccgat gctgaaccga acgaggaaga accctgagca tcacatacac 300
 tcagtaagca aacac 315

<210> 5803
 <211> 391
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-034-Q1-E1-F6

 <400> 5803

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 tctgcacaag tttaggagtg acagcaacaa gagagggatg gcctctgccca ccgtgctcaa 180
 gtctctcttc cttcccaaga agtcgcaatg gggcgccacc aggcaggccg ccgcgcccag 240
 gccgcccacc gtctccatgg tcgtccgcgc ctccgcctac gccgatgagc tcgtgaagac 300
 cgccaaaacg atcgcgtctt tttttttggg catcctggcc atggaccagt tcaacgcgac 360
 ctcccggaag cggctggcgt ccatccggct g 391

<210> 5804
 <211> 404
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-034-Q1-E1-F8

 <400> 5804

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gggggcacac tcttcgtctt caacatctcg ggggggggct tcgccgagca ccgccgcctc 180
tagtactggt acaaccggg ctccatgggc aaccagtact tctcggcct cgagaagttc 240
ctcgccggct ccggcgaccc ctctacccc ggcgggcccc tcttcaaccc gctccgcttc 300
ggcaacaccg atattgactg atttgatctc aacctcaagg agatcaagaa tggcaggctc 360
gccatgctcg tcctctccg ttacttcac catgggctcg tcaa 404

<210> 5805

<211> 354

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-F9

<400> 5805

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tttgggtact tagttttttt tttgttcttg tctcggagtt tgggtgtccct ttgatgaacg 180
aagactatgt ccacgggcac tcagatcaca tgcctcatgg aatacaactc ccgcttttgc 240
ctcagtcgga gtctacatcg gagtttcagc ctctggaata ttaggaagtt gaatattttt 300
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<210> 5806

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-G10

<400> 5806

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ccgtgatgcc caaaagaagg tcctcccgta tgctgactac atcttcggca acgaaactga 120
ggcagggatc tttgccaaag tcagaggatg gaagacgggg aatattgagg agattgcttt 180
gaagatctct caacttcctt tggcttcagg caagcaaaag aggattgctg tgattactca 240

aggtgctgat ccactggttg ttgctgacga tgggaaggtg aaaacgttcc ctgttatcct 300
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cctctcacac ttggttctag gcaagggcat 390

<210> 5807
<211> 389
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-034-Q1-E1-G12
<400> 5807

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ctgcggctca agctgcgggt gcggaagaa gtacctgac ctgtaggaga ggagcaccgc 180
cgcgaggcc accgtcgctc tcggcggtgc cccggagaag aaggccgcgc ccgagttcgt 240
cgaggccgcg gcggagtccg gcgaggccgc ccacggctgc agctgcggtg gcaactgcaa 300
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tctagcttgt ggtggtggtt gaacaataa 389

<210> 5808
<211> 298
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-034-Q1-E1-E11
<400> 5808

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agaggggagg gacagggggg gaaacctggc ccacatcgat aggtacagca gggaggtgac 180
acgcaataga gataggggac cggagggcag ccggcccggg cccaacaccg aggggctcgt 240
gcgaggacy ctgatgatgc tctgtccct cgtctccttc agtcccctg ctggacct 298

<210> 5809
<211> 412
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-G2

<400> 5809

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ggggcgggcg ccaggtccgc ggtggcagca ctgggggtggg tgacgggtgcg cacgaagagg 180

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acgacgacga cgctgatgct gttcgcgggg cggttcgggc tggcgccgctc ggcgaaccgc 300

aaggcgaccg cggcgcttat attttttgcg cgcgactccg gcctgcatac cggtgacccc 360

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<210> 5810

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-C8

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gaaagaccat cagtgatgaa cgctttcgag ttaatctcta cgtctcaggg cctcaatctc 120

gggaggctct tcgagaagca aacgggttct gtggaggag aaacaagggtt tgcgtcaagg 180

cttcctgcaa atgagatact gtcgaagatc taagcagcag caggacccat gggcttcaac 240

gttcagaagc ccaactataa gctgaagctg caaggggaga accctggaag gaaaagtcac 300

ctggccattg caacatTTTT tttttttcct gcttgtgcct agacttctg catggtctgt 360

tgtgctgttc ttggaccctc tgtgctttag actgaaacca aagataaaa 409

<210> 5811

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-C9

<400> 5811

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 ctggcggtgg cgcctcaggg cctgccgccc ctgcgcgggg gcgcctcctc cttgccgctc 180
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 accggcgacg tctacctcgg tggaaccact gggcttctta tcttggtccg tacccttcc 420
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<210> 5812
 <211> 383
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-034-Q1-E1-D1
 <400> 5812

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 cgggggggccg gtggagtacg tccctgaact ggtgggtgag cagaaggacc aggtcgcggt 180
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 agagaggtac cttgctcgcc agc 383

<210> 5813
 <211> 377
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-034-Q1-E1-D10
 <400> 5813

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ccatttgcaa gctgggggga taatttcatt accttcacga gcaagatggc gcccttcggt 180
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attgataccc agtcctg 377

<210> 5814
<211> 384
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-034-Q1-E1-D12
<400> 5814

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aaggatatct acgctgatgc ctttggacaa agaaatttgg actctgacct tgtggatttg 300
atggtaaagg atggacgaca cggaatgtt ttttttatag gttactacat ttatgacaag 360
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<210> 5815
<211> 427
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-034-Q1-E1-D2
<400> 5815

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accgtcgggt ggagggattt tctttttcat ccacaccgcc ttcctcaggg acctctggcc 360
caacaaggag taccactacc ggatcgggca cgagctcccc gacgggtcgg tgggtggtggc 420
aagccct 427

<210> 5816
<211> 271
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-034-Q1-E1-D3
<400> 5816

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cggctgctag agggagcgcg gcggcaacta caggcggggcg tacgcctatg accacaagcg 180
gtgctgctgc cggtcgagggc cgtgccagct caatgctcca attctacact gatgatgctg 240
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<210> 5817
<211> 389
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-034-Q1-E1-D4
<400> 5817

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tgccgcgtccc tcgcgatcgg aggagcaacc atggggggggc acgtcctctg cggcgtaag 180
gagaacccag ccgcggccaa cagcgccgat tccgacgggc tcggccgctt cgccgtcgac 240
cagcacaaca cgcgcgagaa cgccctgctg gagttcgtgc gcgtggtgga ggccaaggaa 300
cacgtggtgg ccggcattta gtatttttct cacgctcgag gccgtcgagg ccgggaggaa 360
gaagctctac catgccaacg tctgggtca 389

<210> 5818
<211> 414
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-D5

<400> 5818

gcgtccgcaa acgagtcgc ccacgcgtcc gggtagccgc aaaagtgtt ctggtggcac 60
atgcacctcg ggctcaggaa ttcaagggga cttcaatctt aataatcttg aagatggtag 120
agtggcctca gcatttatgg ttgggttgtt ggtgtggctg ttgatatttg caagccttgt 180
aaaaagatat aatcctttca ggcttatagg tgttggcttg ttagtgtgga ctatcgcaac 240
agctggttgt ggagtatcat ttgatttctg gtcaattact atatgccgca tgtttgttgg 300
cgttggggaa tcttcatttt ttagtctcgc agctccattc attgatgaca atgcaccggt 360
agctcacaaa acagcatggc ttggtatgtt ccacatgtgt ttaccaactg ggat 414

<210> 5819

<211> 366

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-D6

<400> 5819

gcgtccggaa cgaaaggggc ggcgtgctcg ccgccgacgc caacaaagac ggcggcgtgc 60
atctggggga ggacgacgtg gccgcctct tctccttcgc gcacagccac ctccgcgtca 120
agatggccca gtcgggtac tactattact gctgatgggt cgtccgccga tcgatcggcc 180
aatatggagg catggagcat atggcatcga tcgatgggtt tgtcactact ccatcgtcac 240
ttgtttgtca cagctgggtg ggttggtatgt gttgttgcta cttttttttt ttctctcacg 300
tccgggtgga tgtgtgttgt tatttactgt tacctaaaat catcacttcc acaaaaaaag 360
ggcggc 366

<210> 5820

<211> 353

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-D7

<400> 5820

gcgtccggag ttagacaaaa gataactatt gctaccttgt caaaacaagt tccatgcggc 60
 ttgtgtggac ctatggactc acctcatgga gaacattctg ccctgtatgc aagcgggact 120
 cagggtgctgg aacgtcagac cccctgtat caggggagag ccctttgctt tcatcatccg 180
 ccacacgctt gccggaatca actgtgttgg cttccttgcg gtctacagca ccagcctctc 240
 ccccatgac gatcaccag catccttttg ttgccgtcaa tatccccaa ttactctgtt 300
 ttaagttcca ctatccttct tttttttttt tcctacgttt tatccaaact cat 353

<210> 5821
 <211> 443
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-D8

<400> 5821

gcgtccggag gcaaggggtg cttctcatcc cagcgccatc acggcaagtc acagtcccat 60
 gtggctttcg agaacacatc taccaatgtt gccgcctcgc aaatgcgcaa tgcgctcaac 120
 aggcgggccg acaccgtcac cgaccccgcc gaggggaggt acttcgagac ggaaatggac 180
 aacttcttcg ctctgttccg acgatactc aatgacaagg ccaagggtag tgccattgac 240
 tggaaccgca tcgtctctcc caaggccgac caggctcgta gctacgatga cttggccaac 300
 accgaggctg tctaataattt tttttttttg gcggtcgta atcttaacgg tgggtctcgg 360
 acctccatgg gttgccttgg cccaagtcc gtcattccagg tccctcaacg tatgtccttc 420
 ttggacttgt caatgcgcca aat 443

<210> 5822
 <211> 413
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-034-Q1-E1-D9

<400> 5822

cacgcgtcca ggactctgtg gacaagaacg aggcggagat ctgcctatca aactatatg 60
 ccattgcctg tgtcacggag ggggtgccgt tcatcaatgg gagccccag aacacttttg 120
 tgcctgggct gattgatctt gctatcaaga acaactggcg gatcngtggt gacgacttca 180

agagtgggca gaccaagatg aaatcgggcc tggttgattt tcttggttggg gctggaataa 240
agcccacctc gattgtgagc tacaaccact tgggaaacaa cgacggcatg aacctgtctg 300
cccccaaac attcaggtcc aattttttct ttatcagcaa cgtgggtggat gacatgggtct 360
caatcaatgc cattctccat gggcccggcg agcatcccga tcatgttggt gtc 413

<210> 5823
<211> 405
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-E1

<400> 5823

ccacgcgtac gcagacgcgt gggcggacgc ttgggggggaa tagatacaat tgggtgtagcc 60
acattaagtt ctgcaacgtc tgcagcagcc tccagattgc cattcgggtgg tggaccatcc 120
gggtgtggct cactagatga ccaagatgcc agggggggggg gaaatctgta tcgcctgctc 180
ctacttttat ctaaggtttc tcagaaggaa aatccatctc caattcctga atataacagt 240
gccatagaga atgaacgtgg taccaccgat gaacttgccc ttgcgctgta tggaatgacc 300
tctctgctag aattttctttt ttttctttct gtcaatcctg agcttccacc gggagtccca 360
acagcagttg cttcttctgc catcggattt aaccaatcgt atttt 405

<210> 5824
<211> 277
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-E10

<400> 5824

cacgcgtcca acagatgtgg ctgctagttt gtttgggtatt catggtacac catctccaag 60
ctcagttttg gtagatcctc gatatgaaat tgtgaagatg gcagaaatgc agccatgtgc 120
agaggggggca ccaaaagaag aacagatact aaagtggggg gcgcagattg acaagccaat 180
tctctcttca gaacatgcc tctcaaaaag attcgatcta ctactgact gtttggatca 240
tcattttgtc aacgaaaatg gccattaaag tgttaca 277

<210> 5825
 <211> 395
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-034-Q1-E1-C7

 <400> 5825

 gcgtccgcat gcaatccatc ctatcaccgc ggtacagctt gaatagacac tatgggtctag 60
 agatgcagaa gaagatataa tccccacttg cagagaactt ggaattggaa tcgtggctta 120
 gggtcgacta tgcagagggtt tcttctctag tggaggggga ctagttgact cactatctga 180
 gcaggacttc cgcaagcata tgcctatatt tcagccagag aatctcgaca agaacgctca 240
 gatattccag cgcgtgagcg ccatcgcagc actgaaagga tgcacgccat cacaactccc 300
 gttggcctga gttcactttt ttttttatga cgtctgcccc atacctggca caacaaaaat 360
 ccataacttt atccacaacg ttggggcact gtctg 395

<210> 5826
 <211> 392
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-034-Q1-E1-A8

 <400> 5826

 gcgtccgcaa aaaaagccct tgatatccaa ggaccacgag cgaacaaact ttgattctac 60
 agtctgggtc gatctctcta tgattaacaa acacaataaa aaaactatat gtactaatca 120
 ggttggaatg tttgtatgta ctaatcaatt tagggggctt gtatatacta atcggtttta 180
 taatgtagct gctatgaaaa aatcagaact gaaacaaagg acacaacaat ttttgccact 240
 tcatcaactt cataccatgt tttccaacaa ggatacaact ccaacaacaa ctatctcaac 300
 gtctgtgat tgttgttttt ttttactaca aacaccaagt ggagatgtta tacggtttta 360
 tcgagatcga cacatttaca gatcgtgctt tc 392

<210> 5827
 <211> 364
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-034-Q1-E1-A9

<400> 5827

cacgcgtcag ggagaagatc ggctgatgcc tgatgcctgc ggaggcacia agtcctttcg 60
ggttgctgat caagcttagc tccttctatt agcatgtaga gcagcactct gggtttctct 120
atcagtgagt cagtcagcca gccagtcagt gggttggggg taatcggagt tgtagtagac 180
agtatacatt tctctgggca ggcaatcact gtttgagggtg ttaacagtgc cgttttgccc 240
tcccaattaa gcctctacag tcggcttaag tgaagcaaaa atgcttacct tgtagtagct 300
aaatttacat gtgcggggat attttttgta atagaatatt tctgcgcccc gtacgtggct 360
gttt 364

<210> 5828

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-B1

<400> 5828

ccacgcgtac ggactgaagc gtctgggtcat cagaatccac aacgtggtag aggaagcaaa 60
ggggcggcag atctcaaacc acggcaccct ccagtggctc tccgatctca tcgacggcga 120
ggacgagggc tgctatattgc tcgactccgt cgggtgcgga ggtgaagctg acagagatga 180
cgatggtaag gcaatcccc aagtttcaac cttgtccttg tttaatccag caaagcgcgc 240
gtgagacttg cagcatcgct cggcgcccat gactatacgg gcggtgttga tgagatctag 300
agggtgctcc agagactgtt tttcatgtct ggtgatctga gggagtcat cctgctcttg 360
caaggctgca agcccatccg ccgcctcta gccactagca tcttcggga cg 412

<210> 5829

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-B2

<400> 5829

ccacgcgtca ggacatcacc gccgcgacga cgatggcagc ctgcaccaa gccgcggcca 60
ccctgatgca gccggccaag atcggcggcc gggcgccctt tgctctgctg ccgtcccgcc 120

cggcggggca actcgctgc agggcggttcg gcgggggggc cggcgccgcc aggatcacgt 180
gctccctgca ggacgtcgcc agcaggtgcg tcgacgccgc gaagctcgcc ggcttcgcgc 240
tcgccacctc ggcgctcttc gtctcgggcg cgagcgcgga gggcacgccc aagaggctga 300
cctacgacga gatccagatc atttcttata tggaggtgaa gggcacgggc acggcgaacc 360
agtgcccgac catcgacggc ggcgtggagt cgttcccgtt caaggccggg aag 413

<210> 5830

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-B6

<400> 5830

gcgtccgcaa aagtcccacc aagctgtccc ccgaccactc cgaagaacgc tccaatggcg 60
gcgccggcca gtcctcatg cttccacca cgcgcgaccg ccagcccgcc gtcttctctc 120
agggtcggca ccaaggtctt cgtcgggctc aggggggaga ccaagctcgg ttcgtcggag 180
tcgtcatgcc cgaatgtcag cgctgggttc cactctcgcg tcaaccggag aatctctctc 240
aggttgtcca aaaagaaggc gaccagagcc cgcactctga tgatgcctat tgggtactcca 300
cgtgtgcctt accgattatt ttttgtttga acctggcaat ggcttgacat atggaacgct 360
ctgtaccgtg agcggattat cttcattggg gacaatatac atgaagaa 408

<210> 5831

<211> 238

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-B7

<400> 5831

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ggccaggtgt acgttgtgcg tatgcttgcg cgcgctcgct tcgctttcgc ggcaagtgcg 120
gcggggcggt tgggtggctgc ttttttatga ggggggtggg tatgcttgct gctcccgtca 180
tacgatggga cgtccatctc gtgatgagat gtcagatgtg tgtgaaagag ttctccgt 238

<210> 5832
<211> 420
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-B8

<400> 5832

gcgtccgcag acacgtggga ttgcaaaca ggtcatgtaa ataaccatgg atgagacaaa 60
agtcttaact gttctaaatg tgtgtcatgg atcgctttca ggttctgttt ccatatcaca 120
ggtgagtaat ttaatttctt gtttattttt cggggaggat ttgaagattc tgggagttga 180
gaagattgct tctcaacaag aaataaagaa ggtgtatcac aaattggctc tacgtctcca 240
cccagataag aatcctaggg atgaggaagc caaagagaag ttccagcagc tgcagaaggc 300
tatatccatt cttgggttatt tatttaaaag agctttatat gatgatactg gcatcactga 360
tgatgcactg gtgggagaag ctgcaaacia tcttcacgag tacttcagaa caatgcacaa 420

<210> 5833
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-B9

<400> 5833

cacgcgtcag ccaacacgtc cgcccacgcg tccgcccacg cgtccgaaca cgcgtccgat 60
cgcccgccgc tccaccagaa gcctcggcaa cgtcagcaac ggcggaagga tccggtgcat 120
gcaggtgtgg ccggcctacg gcaacaagaa gttcgagacg cggtcgtacc tgccgccgct 180
gtctacggac gacctgctga agcacgtgga ctacctgctg cgcaacggct ggataccctg 240
cctccacttc agcaaggctg gcttcgtcta ccccgagaac tccacctccc cgtgctacta 300
ccacggccgc tactggacca tgtttttttt ttccatgttc ggctgcaacg acaccacca 360
cgtgtacaac gagctgcacg aggccaacia atcctacccc g 401

<210> 5834
<211> 398
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-C1

<400> 5834

ccacgcgtac ggagccacaa gggcatcaaa cggctcacgg ttaggcaaga gggcatctaa 60
gtttgtcacc aggacagact ccaacacaag ttcagccttt gggaaaagga aagcaactgg 120
gggggggagg tcacagtgca gatctatcac cagcgaggag ggtcctgatt cgacctcatc 180
actacaacag acatctcttt caacgtgaag cagcatcagc tttttgcggg ccaggaaacg 240
cccacagcta ttctgggctg gctctctcaa atgatgctgg cccaaggctc acctggacac 300
atgagttaca tcacccactc gtcgctgttt tcaatcattt aggtggagca ctccaagctg 360
ctccaatcac agtcacgacg tccacgagaa tcccaata 398

<210> 5835

<211> 116

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-C12

<400> 5835

acgcgtccac taccgcgtcc gccactctt ccgctcactc ttaatataaa cccgtccctt 60
cctccaattc tctctctgaa ttctagttct ccaacaatta cagctctatc tccatc 116

<210> 5836

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-C2

<400> 5836

ccacgcgtac ggagtagtct ctctatcaaa gcacttccag gcattgggtca tacagtttca 60
tctaaactga aaagcaaaga aattgaatat tgtagtcaac ttcgcaatgt ttcaaaggat 120
gcgcgcgaca aggatttcgg aaaaaagact ggtgatgggt tatggaatta ttgtagagga 180
attgatcatt caattgttgg atctgttcag gaaacaaaat ctgtgggtgc cgaaattaac 240
tgaggagtca gatttaatga caacaaagat gccgaacatt ttcttaacaa cctttgcaag 300
gaggtttctc tacgcttgta ttgttggtga gttcagggac gtactattac ccttaagggtg 360
aaaacaagaa gggaagggtgc tggggaacca ataaaatata agggatgtgg tgactgttaa 420

aacacgagt

429

<210> 5837

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-C5

<400> 5837

gcgtccgcac acaagtcgc ccacgcgtcc gcccacgcgt ccgtttctgt atactttccc 60
cgttctattg ctaccgcggg tcttatgcaa tcgatcggat catatagata tcccttcaag 120
agggggagta ggtcatcgaa aggatctcgg acgagtcggg aaagcacgaa agccagttag 180
aaaatggatt cctatttgaa gagtgcctaa ccgcattggat aagctcacat taaccctgca 240
atcttgatc caattcggga ttttcttgg gaagtttcgg gaagaaattg gaataatatc 300
gattcataca gaggaaaatt tttttattg atgcaaacgc cgtacctaca ggataaggat 360
agaggaagaa gg 372

<210> 5838

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-C6

<400> 5838

gcgtccggac ttaaattggt attttcgtca ggagctttaa agatttgcat ctctggcaaa 60
tcgagttctg cagtagctag ttcattcatca gataacgagt catcttcaat cagtcaaagc 120
ggcttggtgc tcatccaaga tacaagcagc cattggggta ctgaattcaa tcattgtcat 180
ggatcctctt actgaaagtt atacaatgga atcaagcaga agtggactag gccctgtgaa 240
agccattgtc ttttcccaat ggactggcat gctggatttg ctggagcttt cactgaatat 300
caactgtata cagtacattt ttttatatgg aacaatgtct ctcaatttaa gagaaaaaaa 360
tgtgaaggat tttaacactg accagaggt tacagttatg attatgtcac tgaaagctgg 420
taatcttggg ctcaaaa 437

<210> 5839
 <211> 397
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-A6

<400> 5839

gcgtccgcaa agtacgagcg acccacgtcc acacgacacg aaacaccacc accaaccagc 60
 agccgcacca cgcacccagc gcaaagcgat ggcgtcgctc accatgatgg cgtccttcgc 120
 cgcggtggcg gtggccgcgc cctcgcgccg cggggggcggc gccgtgggtca ggtccgcaa 180
 ggtcgaccgc tgccagcagc ccgccacgct atcagcaacc gaggccaggc ccgccgccga 240
 cggacgccgc gccgtcatgc tcgcggctgc tgcggcggcc gtggcagcca tcggcggcgc 300
 cggcgccgcc atggcggggtt tttttttttg gaccccccat gcgatgaaca agtacgcgga 360
 catctgcgtc accatgccca ccgccaacgt ctgccac 397

<210> 5840
 <211> 425
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-G11

<400> 5840

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 cgcatacctgc ctaacattgt tgtgctcaca tttgacccaa atagtgatgt ccgaacgaag 120
 gctgggcagg ctaccgatca gttcttgcaa atagggggca acaccatgaa aagcttaata 180
 caggagacaa cagtgtggct gaaagtactg gtgttaagtt aaagcctgga aatgcagggtt 240
 tacttgggtg ggccatgagt tctgttacac aaaagggtaa accttttgac catgccccaa 300
 tatctactgc aaatgctatt aattctcaag catcaacaac ctcgactgcc actccagaca 360
 ctcaggcttc cacactagcg tatgcacat ccacatccac ctcgcttgat taagctgcat 420
 cagca 425

<210> 5841
 <211> 395
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-G2

<400> 5841

ccacgcgtcc aagtaaccag aactttgggt ccaaggatga gagatgtaaa aggaagtggg 60
aaggcaatca actacttaac accaccaagg atcttgcttg ctctgggttac tgcattgggtt 120
cgaggggggtc gatgggttga cgacgaggga agagcgggtg atgcagctga agctgataga 180
attcgcaact gggctgaaag tcgagcacgc ttctcggttca ccgacgccat ggagatgtac 240
acggaaaaca catgggtttc cgtattctcg ctctcgggtg tctgtgcgtt cataatcctc 300
tctagctccc gtggacttct tccatgcaca tgatttccag agctgtcaaa ctactagtag 360
acggccatgc atatgctcac tttttacccc accaa 395

<210> 5842

<211> 236

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-G9

<400> 5842

cccacgcatt cgaactaatt cttataacgg ctttggggccc aactactaatt ctcaccaact 60
gctcactgcc gttcctaagc catcttctgt tccatttctt tcacatattg aagtgcacaa 120
tctgggggtg gcatcagtcg taacctatca cgtcaggggt tagcctaagc ttacagatct 180
ttgcaactga ttaccgaact gtcattgagc ctcatgaaat tacttatgta ccaact 236

<210> 5843

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-H1

<400> 5843

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gccctcgtgg tcttgaccgg cgagcgcggc ctctgcggga gcttcaacaa caacgtgctc 120
ggggagggcg gaaacccgca tcgatgagct caggcagggt ggctccagt acaccgtcgt 180
cagcgtgggg aagaaggga acgcctactt ccagcgcgc cctacatcc cggttgagcg 240

cgatctggag gtgagcagcg tgcccaccgt caaggactcg caggccatct ggcacctcgt 300
ctactcgctc ttcgtctctt ttgatgtgga caagggtggaa gctgccctac tccaagttcg 360
tgttcctggg gcgctcccga cccatcatcc a 391

<210> 5844
<211> 248
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-033-Q1-E1-H10
<400> 5844

cgacacaatca ccggtcgcct ctcttccgct cccctgcaaa cctaattcct ccggccaccc 60
cgaaaccgct cgctcgctcg ctgcgtcccc gcgcccatac acatccccgg ataccgtgtc 120
tgactatctc actgaccacc aaatgcgcga gttcaacgat gccttcagcc tcttcgataa 180
cgacagccac cgtttcatca ccccccta gcttggaact gtcatacggt cattgcgtca 240
caacccat 248

<210> 5845
<211> 420
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-033-Q1-E1-H11
<400> 5845

cccacgcata cgacagcgcg tgggcccagaa acagagatag acctgaacac agtgtatggg 60
cacctcgccg ctatgacaaa tctccgcctg ggggtgtttc acatgccttg tcgtcagatt 120
tttcggaaat gcagtcacat tctggagata atgtcgggga actaacagat ggtcatggag 180
acagaaaagac agacacaagg ggtcatggag gtagccgtgg tgttcctggt gaaaatggac 240
ataggcatgc caaccgtcgt ggtaccccat gtgatccaaa ggaaaccaa atatctgcta 300
gcgtgcctga tggaaatatt tctttgaggg gctctgctag ctatgggtgct catgagagac 360
aagtatgggt tcagaagtca agttcaggct cgtgagtttg tccattgatg atactcccat 420

<210> 5846
<211> 328

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-H12

 <400> 5846

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 ccgctgtcac accgtgtctca tcaccaccca gcacaactac accgtgggaa cgacaagatc 120
 tccgcccagc tcaaggagca cgtcatcaag cccgtgatcc ctgacaagta cctcgacgag 180
 aagaccatct tccacctcaa cccgtccggg cgcttctctca tcggcggacc ccacggtgac 240
 accagcctca cctgcccga aatcatcatc gacacatacg gccgatgcgg agtccacttt 300
 tgtggtccct tctccggcaa ggacccca 328

<210> 5847
 <211> 58
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-H4

 <400> 5847

 acctgtggac atgttttctg ctggaaatca atatactttg gtcactatga agccaagc 58

<210> 5848
 <211> 151
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-H5

 <400> 5848

 caccacgca tccaacagct ccgctcgtcg atcagctctc gagatgaaca atcatcgcca 60
 gtgggtgct gccgaccagc tctcgccgcc gccaccgcc cggtatagat gggacggata 120
 ggggagggga actcgccac atccacaagt a 151

<210> 5849
 <211> 409
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-H9

<400> 5849

ccacgagtcc gcacagaata ccccggccag ttgctaaacc ataatcataa cactggagca 60
cagcagcagc agcctgcagc agtccagcag ccgcctgatg agaagcaggg agtcgatgac 120
gaggtgaaaa gggacttgag gagccggggg ctgtgcggcg tcccgggtgtc ctgcacgtcg 180
cacttcggag gggacaacgc cgctgactac tgggccccgg cggcgctcgg cgggatgttc 240
cgctagatag agcatacagc gccgccgtgc cattgaagca tgggtggtcta gacgtacgta 300
cgtagcgggt gggcgagcag ctgtttggtg cgagtatatg tgttcatgac gcttgctgca 360
ggtacagaga tcatcgagct gtctaagaat catcgcgagc tagctagct 409

<210> 5850

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-A10

<400> 5850

cacgcgtccg ctatgttgca aatagataaa aaccttccca tcttgcaaaa gggttgaagc 60
ttggcctcta caatgacgcg gggacacaaa cctgcagcca aaaaatggca gtatcacttg 120
atcatgggga ccaaagtgtga aaattttcat cttgggctgg gaaatgctag tatcacttga 180
tcacaaagag caagatgtgg aaaaaaacat catgggtaaa tctatztatg tttatttcct 240
gacaactgtg acaagtcaac agtgacaaaa gtatctgac gtctcttggt ctaagttcct 300
ggtattgttc caactcttct tcattctatt taatatctga tcatctatct attgtacgta 360
ctgattaaca atatgatgac tataataatg ctggtaggag tgtgaca 407

<210> 5851

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-A2

<400> 5851

cacgcgtcag ccaacgcgtc cggagattta aaggtgaatg gatagttaaa gaagaaaaca 60
agaagatcaa aggacactta gacattcccg agttctcggt cggtgagatc gatgacctgg 120

gggtggaagt aaggttcagt gacgacaagg gccgcgggtc cgacgacaag gcacggatct 180
gcaaggatct caagtccttt atggccccga ttcaggagaa aatgcgcgtg ttcgaagaag 240
agctcaagg tagatagcga gcattagcga gaatcggcag tgctaggtgg gcgctgccgt 300
gcccgctgtg gaatgattat tattacatgt tgacgtcttg tgggtgtctcc acgttctaaa 360
gtcgtcttcg gatgactggg actgtctgtg tactgatgcg atgcacttcc ggag 414

<210> 5852

<211> 146

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-A3

<400> 5852

ccacgcgacc gaacacgcgt ccgggtgctt ctggtttcgc acccattcgc ctgacggcaa 60
gccttactgg atcatcaaga actcgtgggg ccagaactgg ggggaaaacc ggtactacgg 120
gatgggcacg ggttccaacc ttccca 146

<210> 5853

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-A4

<400> 5853

ccacgcgtac ggacaccgcc acaaggagga gcgtccgtgt agctgccgtc gtcgcgaccg 60
aggccgcgca gatcgactac agctcaagcg tctcgggtgt cccgatggag gcctgcgacc 120
tgcgtggtgg cgacgcgtgc aacggggcca tgtgcgggga ggccaagccc gcctcggcgg 180
cggcggcggc gagcaggagt gtggtcgggg tggacaggga ctacctgtcc tacgacgagc 240
caaagacggt gttcccgggc gaggcgtgcg atgaccttgg cggcgagttc tgcgaggcgc 300
cgtaccagga cggcgtctct ttttatcttg cgcacgcctg aagaccctga tccatccatt 360
tctgtccacc acgctatgta cgtatgtgta gcagatgggt tacatctacg tgtagagcc 420
cgg 423

<210> 5854
 <211> 225
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-034-Q1-E1-A5

 <400> 5854

 cacgcgtccg caaacgcgtc cgcccacgcg tccggagacc aacaagcaac atagaaagtg 60
 gaatccagta gcaacaatag agcaacaatg gcgaccaaga tattttcccc ccttaagctc 120
 cttgcgctt cgcgaagttt tgccaaagcc aaaaatttgc ggtcaatgtc aaaaacttcc 180
 aaaagcttcc cttcttcccc cataccttcc atcaatgata gcttc 225

<210> 5855
 <211> 368
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-G10

 <400> 5855

 ccacgagtcc gcacttgatca cttgctctcc ctccaacaag ctaataaagg ccggtcatcc 60
 ctcttctagc tcgtttcatt atccatggcg gaggagaagc accaccacca ccacctgttc 120
 caggggaaga aggacgagga gcagctcgcc gccgggggggt acggcgagtc cgccgagtac 180
 acggaggcca cggtgacgga ggtggtgtcc acgggcgaga acgagtacga cgagtacaag 240
 aaggaggaga aggagcacia gcacaagcag cacctcggcg aggcgggcgc catcgccgcc 300
 ggcgcttcg cactctatta taagcacgag gcgaagaatg acccgagca cgcgcaccgc 360
 cacaagat 368

<210> 5856
 <211> 403
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-033-Q1-E1-D1

 <400> 5856

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tcgacgcggc tgagctgggg tcctggtcgc tgtaccgcgc cgtgatcgcc gggttcatcg 120
ccacgtgct gtctctgtac atcaggggtg gccaccgtga tcgggtacaa gcaccagacg 180
gacgcgtccg cgtcgggggc cgacgcggcg tccggccgcg tgggggtgct gggcatcgcc 240
tgngccttcg gcggcatgat ctctctctc gtctactgca ccgccggcat ctccgggggc 300
cacatcattc tttttttcac ctccgcctc ttctgggcgc ccagaggtcc cccggtgcgc 360
ccgctgctct acaacctggc gcagttctc cgcgccatct gcg 403

<210> 5857

<211> 363

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-D10

<400> 5857

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ggttaccaag accaagcaga tctactgagtc cgttgatgtc ctccgcgcac ttgcccgctt 120
cagggggcct gaaaccactc agactcataa ggggtggggct atcgatgtac tgagctgaga 180
agcagacgat ctccgggtggg acttcactaa agatgctctg tgcctctgta tttgtatcag 240
aagccttttg ctgaatggca tacaacagca agctagtatg aagtccaata ctaactgttc 300
atacagcaag tgactgatcc tttgatttgc ggaatcaatt atgatgctgg attgtgacgg 360
taa 363

<210> 5858

<211> 312

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-D11

<400> 5858

cccacgaatc cgtattttga ccctaactat agacgctatg ctctcaaaaa atcacaggta 60
catgttgacg aatatttcac ttattatctc ggaatttctg gtgctacgtc ggctgagagt 120
ttttggcggc tgtagtgaaa ttatgcatct tcatgggggc tatccactac ttgtaagggt 180
tacaatgcga tgtaaccgcc ttgacaatgt ggtataccca gtcgaactc tatatgcaca 240

cattgccggt attttgggtcc tagtggataa agtcagcaaa gggatatgcta taactagctt 300
tcaatgggaa ag 312

<210> 5859
<211> 405
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-D12

<400> 5859

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actgacatcg gataacagtg atgggtgctgg attataaaac gaagatatcg gcgatgatgg 120
tgaggatatg gaaaatgaca aacctttgtc tgaggggaaa acctacgaag atgacgggac 180
cagaactgta gtcaccacca gtgaaattac tcctgaagaa gatgacattg tcccgaaaac 240
tttcggcccc atggcgacga ccctcaccag catgaatcct agctcttttg ccaagaacaa 300
cagcagttta cgtgttatta ttaagccacc gaagagaacg ttcactagca tcgctacagc 360
gaaaacgggt gacaagaacc cgggtgcctg caaatggtaa aacga 405

<210> 5860
<211> 339
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-D2

<400> 5860

aaacaaacgg ccggctggcc atgttctcca tgtacgcctt cttcatccag gcctacgtca 60
ccggcgaagg ccccgaggag aacctcgcca agcacctcag cgaccccttc gggagggacc 120
tgctcaccgt catctccggc gccgggggga ggacgcctat cctgtaagga cggacgccac 180
gccgccgagc aatgccaaagt catgcgctgc tgcattgcct ctttgatttt accgggataa 240
aaagctgtat gtgaggggtc gaagaatgtg caatgccac gcgtgtaa at ttcgagag 300
gggaattttt cttttcatto tgattgtgat aaaacaacc 339

<210> 5861
<211> 312
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-D4

<400> 5861

aggggacccg tagcgccagt tctcggcggt ggcagtaacc actcggtgag aaaacgacga 60

gagcctcccg tcgtcatttc ggagataaaa ccaccggcac tgccaccctt tgggcgagga 120

ccctaggatg gcacggatgt aggggggggc ccgcgcctac ctcagctgga ggatgcagcc 180

accatcccg c aacgccatgc gaacccttct tcccccgtc ggcgatgcaa aaagctctgt 240

ggagaaaaga ttggtccaca ggtcccactg gggggcaatc cccaagtatc cttcactaac 300

cgcctctttt tt 312

<210> 5862

<211> 296

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-D9

<400> 5862

tgagtcctac aaggagggcg tcggccaaaa attacgcagc atcggcaaga tcgtcaaccc 60

catcgacgtc aagttcaccc gcaaggccac cttcaactaa tcacacttgg ggtacgccgc 120

acgccccagc cgggatacag ggtaaagaac ttcttcttct attaattaca gtgtagtgta 180

atttggtcgc tggtaggtg gtgccatgat ttgacatgtg catcatgac cttgtgtaat 240

tttatcacct agtctcttct tacatttaca tgtccatttg cttgcctctt gcatac 296

<210> 5863

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-E10

<400> 5863

cccacgcac cgcacacgct tcagctatct tgttgatc cccttaatac tcaccgttc 60

atttaatcca tcaaatcaga tcacagagtc tattcatgtc atctctcaaa ttccttcctt 120

caggggcact ccttctactc aacatattag cgggtggggca atttttgtaa tgaattcata 180

tatcatggat cttcaatatg acttcagtat tcacccctctc tacgggttcta cttcttagat 240
acaccatttg ctcaagtgcac tatttccact ctacagtaga ttgtacaaca caccctgtac 300
atttatcaag tgctttatct ttttatattat agaagcagat accaacaatgt atcatttttag 360
gcattatcta ttcggtcatt catcagaatg tatctacatt gaccttttca accatttcac 420
catttcctcc 430

<210> 5864
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-E11

<400> 5864

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aacctgctat gctcaggcat cccagatccg tcagatccgc cgtaagatgg ttgagattat 120
gatggggcag gcttctacat gtgacctgaa agaggggggtt tcgaagttca ttccagaagt 180
tattggtaag gagattgaga agtctacctc cagcatcttc ccacttcaaa acgtcttcat 240
ccgcaagggtg aagataactca agggccccaa gttcgatctt gggaagctca tggagggttca 300
tggtcgactac aaagatgatg ttgggtgtgaa gcttgagagg cctgtccagg gagatgatgc 360
tgtgcacgag gttgctgctg ccgagtagtt tgtttgctac ctctatatct aagctgagtc 420
cggaatgac gttg 434

<210> 5865
<211> 249
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-E12

<400> 5865

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agctcgagag ggcaccaata atggcctgctg tgaactccac cgctcgtcggg ctcaaaccg 120
ccggggcaat gctcaagcc gccgcctcat catcgggggc gaaactgttg aacttgggag 180
caccggaggg cggccttgcc gatctgctcg gactgtctgt ccgtcttccc cgctcatcggt 240

catcaccat

249

<210> 5866

<211> 110

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-E6

<400> 5866

atccacacta tctcacatta acttacaata tcaaaaaagt atacaccatc ccaaatacact 60

tcaacattca gtcacatcaac acctcccttc accataacca tctcctctct 110

<210> 5867

<211> 292

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-E8

<400> 5867

cccacgcac cagagacgcg tgggctctct ctcccctcta tgtacaatgt gccctggcct 60

cctccgccgc cattgcagcg agcaagatca atccctctgc tgccattcat gagtcaaggt 120

ggggcattcc ctctgtgaa gaacatcagg gtgggggtttg tcatatgcgg cccaagcatt 180

ggcaagggca cccagtgtct caagattgtc acacactttg gattcaccca cttatcgca 240

tgcgacctcc tgcgccaaca agttcagtca cataactgaac acggtgccat ga 292

<210> 5868

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-E9

<400> 5868

cccacgaatc cgaaatctgt ccagattctg tgctgatttc gaaaatgacc ttgtttgtcc 60

aagttaaact gagaatcagc tcttagtaat tataggagaa ttgtagtact tgtcttaagc 120

tttcgagaca agttttggat cacctttttt ggtgatggaa aagttgagtt acagctgttt 180

gaattgtgat gtccaaacct gtccaaatct ggacagagaa gtttgtttgt attagctgac 240

tttgatccac attgaatcaa cctgaaatgt ttataaagga tttgtagata attttataag 300
ctttctagaa agtctaagat cacctgtttt ggatgcctaa atctctagtt atggagtttt 360
gaagtggata attgaattct gtccaaatct ggacagcatt attgttttgt actgtttgac 420
ctttctaagt gtccaatctc at 442

<210> 5869
<211> 256
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-F10

<400> 5869

ccacgcatcc gaacaatcac ctgtcgctc ttttctctc cctgactaa cccttcctc 60
tggccaccct caaatcgctc tctcgctgc tctctcttt ccccttata cactctctg 120
gtaggggggc cgtcatctc actgactatt atatgtggg cttctccgac gccttcaggc 180
tttctgaggt gggtctctat tgtttcatca catcctacga tcttgtttct gtcattcatt 240
tactgtgtca tcattc 256

<210> 5870
<211> 263
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-F11

<400> 5870

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tcagtgcctt tatgaaggag ctggaacctg agtcacctgt taccactgt gacctgcacc 120
gacggaaatt gtcaaccgcc ccttttatag aaaggggctt ggaatttctg attgggtgca 180
tggatgatcg ttcatcacac cagaacacgt tccaacatta taaccgcaat ctctcaagac 240
aacagtcaca gcaacaggca tgg 263

<210> 5871
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-F12

<400> 5871

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ctgctgcagc catggcgacc tccgcggcgc tctccaccgc cgccaatccc acccagctct 120
acgggtcccg cgcttcgctg ggcaagccgg tgagggggct tggcctgagc atgggccgcg 180
agcgcgcccc gcggagcatt gtgtgccagg cggcgagcag catctccgcc gaccgcgtcc 240
ccgacatgga gaagcggaag ctgatgaacc tctctctcct cggcgccatc tcgttgcccc 300
ccgtcggcat ggtcgtctcc tacggcgctt tcttcgtccc tgccgggtcc gggaaacgccg 360
gcggcgggac ctacgcgaag gacaagctgg gcaacgacat c 401

<210> 5872

<211> 140

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-F5

<400> 5872

cccactcatc caaaaccctc tgcgcacaac acgtcctgca accaataata ctgttacgaa 60
tttgcgtatc acacaacaca ccgcaaaata tcctttaaac cctgatgtca actcctcatg 120
gtaggatcca caaaccctc 140

<210> 5873

<211> 119

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-F6

<400> 5873

accacgcat ccaaccacac ttccgatcaa taatccccga cagtaaaaaa gccccgccgt 60
gtccgctttc aggtcccaca tgacgactcc atgggtcagc aagtcaaata acaactcac 119

<210> 5874

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-C9

<400> 5874

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cagatcgaaa aggggggagg aattaaattg tggagtcggg tggtgagatc tgatttatag 120
atggaggttg attagcccgg ttggtaacat cagtcgggtg tggtggtggt agtggtgcaa 180
gagcaagacc ctgaccgacg gcctctgcct ccttgcatct ctgttcgggt ttgtgaagcg 240
cgggctctat aaatacgact cagatctgag aggccttctc ctcgccgcc ccagtctaata 300
ccgattcaaa ccgcccgttc ccgtgtccg tgccaagcaa gccgagcca accccaaga 360
gccagctgct cgggtgctcca cgcatggct cagaaggaga ctaatggcag caacggcgat 420
tacatctcc 429

<210> 5875

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-B10

<400> 5875

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agccaccatc agttcgattt cattcaagaa taaacttaac atgcgttaat catgaaactg 120
gagtgggtga cccaaagaag ttcagcggtc tgggtggggg gcagcgtgat tactcaatgg 180
aatacatcct aaccatctc aagaaagaga tgacatcgcc acagaaccgc aagctagttc 240
agcctccgga agggacattc ttctaaagat ggcagcaact catgtccatc catggtgact 300
cggaaacagc ttccgcacct gttttctata ttttatatat ttagtgtgat ctcccagtta 360
tctgtgaacc accgagatcg actgcaacca gacttggttg atttacaatt tgcccgggtg 420
ttgctaata 430

<210> 5876

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-B11

<400> 5876

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ctttgggcaa tcattatgga tgcaggaact ggcttctcag ctcaagttta tgagctatct 120
tcagagtttc ttcataagga gtggatcatg gaaggggggg ataaaagttt ctacatcagt 180
tctgttgctg gtcceaacia tggaagttct attgtagtga tgtcaaaagg cacaccatat 240
acacagcaat cttataaagt cagtgattcc tttccattta agtggataaa caagaaatgg 300
aaagaaggtt ttcattgtgac tgcaatggca acatcaggca atcgatgggc tatagtcattg 360
tcccgcagtg ctggattttc tgagcaggtt gtggagttgg acttcttgta c 411

<210> 5877

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-B12

<400> 5877

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gcgcggagag gggcagccag tacggcgccg gggcgggggc gggggcgatg aacctccgga 120
gctagggcgc ctctacgag cgaccgatga cagcggggcc gtccacggtg caccgcgcca 180
ggagcgtgag ctctgggagc acgccgccgg cgccgccgcc cgtgcagcgg gccgggagca 240
ccaagagcgg cccaccgcc gccgcgggtg gccgggccgc cccggggctg aacctgcgt 300
cctacagcgc ctctactct ttttctacg ggccaccct gcccgatacc tgcgggcagc 360
tgaagcgtc cggcagcgtc accaactgga cttccgcaa ccgccgtcc gtcaacctga 420
gggggtaccc cc 432

<210> 5878

<211> 198

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-B4

<400> 5878

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aactgtccct tccactaaac ctacaacaac tccttcacca tgggcaggtg tcctcatcac 120
atccatcatc actcgtgggg gcgtccccac cgcccaattc tactacatcc catcttcttc 180
cctcacctgc ttcacccc 198

<210> 5879

<211> 349

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-B5

<400> 5879

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tcaaggcacc cagggcgggg tgagcctgca ctacggtatc ggggacgggg accagcgcct 120
gacgctgaac tacggggggg ggtcgatctg gacgtaccac ttctgcggca actggggcct 180
cctcgacctg acgccggaat tccgcgcttc gtactggtgg gctgacggcg atcgttcgcc 240
gaccagcctc tggcaactga acgcatccc catgttccgc tggtagaccg gcgatctttt 300
ttttttccac acccgatatc gcgccaccgt gttctcgcgc acccgcttc 349

<210> 5880

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-B9

<400> 5880

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gccactttca aggtggtgga agggcttact gtctgacgg cgctgcactg atctatcatc 120
atcaggcgga ggcgatgca tgatgatgca gaacttggt catgcgttg tggatggtg 180
tgtaacatag tggctgcaa caagtcatgc tcatgcaaac cgatgaatct atctctgtat 240
catcgatctc ggttgcttgc tagtcagac tccagacatg gctatatata tatagctggt 300
gctaataaat aggagtataa tcgtcatatc gatcggttgc gtgtggaatg ccaatcatgt 360
gtgtaatctg ttggcaaata acaaacctct gttcctccc 399

<210> 5881

<211> 449
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-C10

 <400> 5881

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 tttcctgaac aacgctccaa tcattgctgt tgatcgggct ccaaattgta ttgctatcaa 120
 tgtgggcccc attgaatatg gacatgtgct tctcaggcct cgtgttctgg accgcctgcc 180
 tcataggatt gatccagaga gcttcttgct tgcactgcac atggcagccg agggaggtag 240
 cccatatttc aggcttggtt acaatagctt ggggtgcgttt gccaccatca atcacctcca 300
 ctttcaggcg tactacttgt cagtgccttt ccctgttgag aatgcagcta cccacaagat 360
 cccactctct gatgacacga acaagaattg ggtgaccgtg tccaagctga aaaattaccc 420
 tgtgacaagc cctgtatttg atggaagga 449

<210> 5882
 <211> 123
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-C12

 <400> 5882

 accgtgggtg aattagagag actatatcaa aagatgagag gtacatgttg aggaaagttg 60
 gattgaaaat gaaacatttt ctgctgcaag gtcgaaggga agttttgggg gcaacaatta 120
 aaa 123

<210> 5883
 <211> 301
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-C2

 <400> 5883

 aataaaagag ttgcaccggc cccgccccgc cccaacaaac cgccccacc gcagcgcccg 60
 caaagcctcc aaacaccacc acctatccgc cagaagcctc ttctccctc gcggtcgcgc 120

catctgcgcc ctgccaataa ccgcggtggt gaacctcacc ctactgaaga agcactcacc 180
 aacacccaag cccctgttc cctcgccctc tccgcccgcg caagattgac atcccggatt 240
 catacatgtg ctaccattcc atttgatttg gcgccgagca ctttcctatt gccgcctcca 300
 t 301

<210> 5884
 <211> 120
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-033-Q1-E1-C3
 <400> 5884

acgcgtccaa tttatTTTTT tttactggaa caaaattcac cacataaaaa tcccatttac 60
 atttcacata tcaacaccac acaatccttt tccatgaatc ctcatcaatc ctccacctta 120

<210> 5885
 <211> 99
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-033-Q1-E1-C4
 <400> 5885

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 gggctcctct tcctctcctc acgttctccc atcaaacc 99

<210> 5886
 <211> 99
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-033-Q1-E1-C5
 <400> 5886

tcctctcatt cttttactgt tactgaaaac acttctcgaa cttttgtccg cttttaccag 60
 accttccata tcgagttcgt gggagttcgc cactctacc 99

<210> 5887
 <211> 374
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-C6

<400> 5887

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gcagctagct gtggactgtt gacagtgagc actacagtcg gtgggtgtccc tgaggtgggt 120
cgggatgaca tgatagtact tgcagaaggg ggggggtgcag atatggtaag agctgtcaag 180
aaagccatcg acatgctacc tggaatagac ccccagatta tgcattcttcg gatgaaagaa 240
ctttatagtt gggacgatgt tgccaaaaga actgagattg tttatgatcg tgcaatggaa 300
tctccaacaa tttttttact agatcgctt cctcgggtatc ttacttgtgg atcttgggct 360
ggaaaactgt tttg 374

<210> 5888

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-B1

<400> 5888

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atgcacactg tgtcgcgttc ctcacaaag acccccaaaa ggtgaaaacg gtcgatgaga 120
tgagggagcg gctgaggatg cgtggtctcc gctgccacag gaggggctgc atgaactcga 180
caaggcttca ggttgtccct ctgctagcat caaggtcaca ggcactcagg tatctttccg 240
tgcgctgggg cgtatctgtg gggaacatgt atctgatcac cggggaacat ggcgacaccg 300
atctacagga gatgctatcc gggctctttat attaccgtga tcgtccgtgg cgtcaccgag 360
aagggttcgg aagcact 377

<210> 5889

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-H11

<400> 5889

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gcgcttctcg tccgttacac cgccggcgctc actctgcacc gcgcgctgca tccagcgtca 120
ccgtctccgc gccttcccaa gctcggaaat acctctagag gaactcaacc catccgtcga 180
tctacttagg agaactgcgg aggcggttgg cgatttcagg aaaacgcca tctatatattgt 240
tggtacggat tgcacagcca agcgcaacat cgccaagctg cttgcgaatt ccataatata 300
ccgetacctc agcagtgagg aactgcttga ggatgttctt ggtggcaagg acgccctcag 360
agccttcaag gaatctgatg a 381

<210> 5890

<211> 417

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-032-Q1-E1-H2

<400> 5890

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aaactgctgg ttaaacaagg gaggtccttt cactggtgaa ctcaagtctg agatgctcgt 120
caaccttggg gttccctgcg tcattcttgg aactctgaa acgagagctc tgctgggaga 180
atcaaatgaa tttgttgagg acaaggttgc gtatgccctg tctcaggac taaagggtcat 240
tgcatgtgtt ggtgagacct ttgagcagaa ggaggctggg tctnacatgg atgttggtgc 300
tgcacaaaca aaagcaattg ctgagaagat caaggactgg agcaacgtac ttgttgcccta 360
tgaaccagtt tgggctattg gaactggtac agttgccacc tcagctcagg ctcagga 417

<210> 5891

<211> 441

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-032-Q1-E1-H4

<400> 5891

gggtccacct acgcgtccga gaacgcgtca gaccccaagc accagcgcgg ctgcggcgcc 60
gcggggaacc aggggtgtcg gaaagaacaa acgttggtcg cggggaacac agggggtcac 120

aaaaaaacgg gcaacccttt ctcaaaaaag gtttggtatg aaatcaaggc accgtcggtg 180
 ttcattgtgc gcaacatcgg gaagactctc gtatccagga cacagggtag caggattgct 240
 tctgaggggc tgaagcacag agtctttgag gtttgcctag ctgatcttca gggcgacgag 300
 gatcaagctt acaggaaaat caggctccgt gctgaagatg tgcagggcan gaatgtgctc 360
 acaaactttt ggggcatgaa ttttaccact gataaactca gattcctagt gaagaagtgg 420
 cagacattaa tcgaagccca t 441

<210> 5892
 <211> 390
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-H5

<400> 5892

cccacgcgtc cgcccacgcy tccggcttaa atctccgaca ggctcttctt ctggagatgg 60
 gtttgatgtt atgactctag ccacagatca gcctgctgga ccagtttcag caacgcctaa 120
 ggtacctaat gccagagatg atgataagtt caatgatggc atgtacgaag acttgtgtgt 180
 agatgatgct gaccttacat tcgaggatta tgaagagctt tttggtacct ctcacattcg 240
 aacagaggaa ctctttgatg acgctggaat tgacgggttac ttcgaattga aagagacacc 300
 acctttttat ttcaacgagc agcccaaagc tatgcagata gaatgtggca acgtgggtatc 360
 agctgattgt gcgatgtcaa acccaagggc 390

<210> 5893
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-H6

<400> 5893

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 agctgatggc ggaggcccgagg gggaaagcaa agcaaatggc ggaggccccc agcaagatcg 120
 aatccatgag gaagtgggtc gtcgagcaca agctccgagc cgtaggttgc ctctggctag 180
 gtgggatcag cagttcgatc gcctacaact ggctcgcgcc caatatgaag cctagcgtca 240

agatcatcca cgcaaggttg catgctcaag ctctaaccct ggctgcatta gttggttctg 300
catgcgtgga gtactatgac cagaagtatg gttcttctgg gccaaaggtg gacaaatata 360
caagccaata cctggcccat tcccataaag attaaaggtc gccatgttgg ttcttgcattg 420
c 421

<210> 5894
<211> 398
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-032-Q1-E1-H7
<400> 5894

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gatctctgcg tgcgtcgatg gcgtcgttct cggaggctcc ccccggaac ccgaaagccg 120
gcgagaagat cttaagacc aagtgcgcgc agtgccacac ggctcgacaag ggcgcgggcc 180
acaagcaagg tccaaacttg aacggtcttt ttgggagaca gtccgggtacc actgcaggct 240
actcctactc tgcgggaaac aaaaacaagg ctgtagtctg ggaagaagac actttgtatg 300
agtacctgct taaccctaaa aagtacattc ctggaaccaa gatggtcttc cctgggctga 360
agaagccgca ggagcgtgct gatctcatcg cgtacctg 398

<210> 5895
<211> 290
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-A1

<400> 5895

cggacacgtg gggaattgct gaaccagctt gaaagattta gcagcgatga gaggataaag 60
gtgatacctg caacaaatcg tgctgatatt ctgatactg ctctgatgag atctgggcgt 120
ctggaccgga agattgagtt cgggcaggca tcacaggaat caagagctag aatcctgcaa 180
attcactcga ggaaaatgaa tgtgaatcca catgtcaact ttgaagagtt ggcgcgttca 240
accgatgatt tcaatggcgc tcagctaaag gctgtttgcg tagacgctgg 290

<210> 5896

<211> 449
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-A10

 <400> 5896

 cccacgcatc cgcacacgcg tccgctgaac ttgagagaaa gctggcacgt cacttctgtg 60
 gtcacatgga aagcagcttg tcttccaga ttcagccatt cccattcgtg gcatctactg 120
 ctgtggcttg tagtgcgtca caattttgtt cttcggggga cgtagttgta gccacaagaa 180
 tcgctgctaa gggccgggtt gatgaccaga gatcacgagg ggatccataa atagcaatgg 240
 gattcctctg acatggatcc tctcgcgac cttggccacc aaattagtc ttagatcatg 300
 gggattggaa gaggttgta tttaaattag ttcatttctc ctcaatctcc ccaatcttcc 360
 gtgattccct tttatcacta aatcaaccct aagagcta atctacggta aaagctagag 420
 ctagtcatct gtcattctct tgggatatg 449

<210> 5897
 <211> 162
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-A11

 <400> 5897

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 tacatccatt cgcggaccgg aaggaaagga aaaggtttaa ccatgagcgg cgttgctgtt 120
 tcctcctcgc tgaaaccggg gggcccgctc ttcattccgg gg 162

<210> 5898
 <211> 340
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-A2

 <400> 5898

 caccggtcca accaagcgtc cggatctctt gaagagctaa gcaggagac actagaactt 60
 cttgtggtac ctcatatatt caggatcca agctctgtgc taccgattaa ttgctgaaaa 120

gggaggggttg ggttcatggt aaatattccc aaggagggat aattgggcaa cgggtgtgtgt 180
 atatgttcag attcagaaag tgaggacaat atagcgtttg caacagtggg cgtcgccctg 240
 tgcagggagg gcttgcgtgat cagagatcaa gagggaaagc acaagacacg ttgtgccggg 300
 aggaaacaca ccatttttgg ttttacttag aagcaataag 340

<210> 5899
 <211> 109
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-033-Q1-E1-A5
 <400> 5899

cccacgaatc caaccacgcg tctgcccacg cgtcagtgtg acccacactc agccgcgtct 60
 cgtcgcatcc tacgatccaa agctctcact gctcgcagggt ctaacccat 109

<210> 5900
 <211> 175
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-033-Q1-E1-A8
 <400> 5900

tccagcctag ctctatatct cgagtattgc tagctcacia caagaaacia tgcagagcac 60
 caacaatggc cgccgcttcc tcttctcgg tcttctgct gcttctgccc ggggcgttgg 120
 ctggcatcag cgccaactcc gggaggggtg ccatcaccaa caactgcggg ttcac 175

<210> 5901
 <211> 415
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-032-Q1-E1-F7
 <400> 5901

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 cggtttgccg accaggttcc accgttccag agtagccaag cgaatcccgt gtctggttcg 120
 cgcgatggcg gaggagcagt ccaacccccg gcaccagcaa gcggaggaga gggaggttat 180

ggtggagcag cagcagccga ggagggcccc gaagctgagg tacctggact tcgtccaggt 240
 ggcggctgcc caggccgcgg tgtgcctcgc tgggctctac ggcttcgcca aggaccacgc 300
 cgccccgctc cgccccagcg ttgacgccgt cgagtctgcc gtcaagggcg tcgttagccc 360
 cgtctacgac cgcttcggcg gcttgccgct cgacgtcctc gccttcgctc accgc 415

<210> 5902

<211> 358

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-032-Q1-E1-F8

<400> 5902

gcgtatgaac agggaggtat caatgtggat gaaatgttca ggcgaagaca gtggtgacga 60
 gacagacatc cccttcatac ctactagagg ttatgacagc gtcgtgtgga gtcgaatgta 120
 ctgcgaagac cctgccgaaa gaacacgaca cgctttgatg ctatcttcta ttgctgctga 180
 acaaacgcta gaagctgtag gagccaaagg gatgggtgta gggcacacac cacagacgca 240
 tgggggtgacc tgtaaattgt atggcaaagt ctgggtgcgtg gatgtgggca tgcctgtgg 300
 tgttctttgc tcaaaggcan aggtcctana aatagtcaat gacagaccaa aggttttg 358

<210> 5903

<211> 256

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-F9

<400> 5903

agccaacgag gacgccatga agactggctc cttcttcaag tagaaagcaa ctctttgcta 60
 ttgctagcta ggcgcgaggc cggcatagga tcgaggagg cgccaccaa atgcattgga 120
 gctaacgaac agcgaggggc gatcatggca gcagctgcca ctacatcttc taaacttgcc 180
 atttttatta tccctgatcc atgtattact ctttaattgt acgtactaca atacgggatc 240
 tggccaagcg cgatat 256

<210> 5904

<211> 391

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-032-Q1-E1-G1

 <400> 5904

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 gatcgttgcc cttgctctcc tggcgctcgc tgcgagcgcc gcctccagta caagcggcgg 120
 ctgtggctgc cagacaccac cgtttcatct accgcctcgg ttctatatgc cgctccggtt 180
 ctatctgccg ccgcagcagc agccgcagcc atggcaatac cccactcaac caccgcagct 240
 aagcccgtgc cagcagttcg gatcctgcgg cgtcggcagc gtcggcagcc cgttcctggg 300
 ccagtgcgtc gaggttctga ggcaccagtg cagcccggcg gcgacgccct acggctcgcc 360
 acagtgccag gcgctgcagc agcagtgtg c 391

<210> 5905
 <211> 373
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-032-Q1-E1-G10

 <400> 5905

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 gccatcggcc gccagagcgc ctctcgctgc ggcgccgctc gccatagcca ccgccaccgt 120
 cctcctcccc ttcccaccag cgggtggagaa gatcctgcag gtagtgcagc tgtgagggcg 180
 tggatctcca gacagtgcag cagttgggtg gcaggtggag cagccccagc aagttgtgtt 240
 agccagcacg catgtgattt tttattgctt tattttttgt ctgcaagaac ctgagttgac 300
 aatggttgcc tgggtgggta ccaagtgcaa ttttctgggt catgatagtt cagaaaaaaa 360
 cgaagaactg aat 373

<210> 5906
 <211> 373
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-032-Q1-E1-G11

 <400> 5906

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 caccacaag gaggaggacc tgtactagag atcgggttgc tttatgcatc agtgggttgc 120
 ccaaggggtgg tgggtgcgttc gttgctgttc cgtgccacca gcggaagggg gatttcgttg 180
 ttgagatggg ctagttcttg tcatcaattt cggtcattcg atgagatcat ggcataatgag 240
 ttgtggcaat aatgctggca atatggtttt gcaattcaaa ctgcaaagt gaccagcaat 300
 gtcaaaaact gcacactgtg tctctgtgcg aacttgtgaa attggcattg agttcaattg 360
 gctagttggc tcg 373

<210> 5907
 <211> 394
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-G12

<400> 5907

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 ccgttcccca acctctcgtc tgctgcctgc ctgcctgcct gcctgcaaaa aggagtttgc 120
 catggcgctc aagcgcatcc tcaaggagct gaaggacctg cagaaagacc cccccacatc 180
 atgcagtga ggtcctgctg gtgaggacat gtttcattgg caagcaacaa ttatgggacc 240
 acctgacagt ccctatgctg gcgggtgttt cttagtgaac attcatttcc cgccagatta 300
 ccccttcaaa cctccaaagg tttctttcaa gacaaaggtc ttccatccta atatcaacag 360
 caatggaagt atatgccttg acattctcaa agag 394

<210> 5908
 <211> 448
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-G3

<400> 5908

gggtcctagc acgctgtga actgacgtcc tgtaggatac caaagcttgg aacatgtcgt 60
 caaatgcttg ctaaagtttc caatctaatt gtttacttgg atgatcttta tgatgtatat 120
 ggaaccatag aagaacttgc actcttcaca aatgcaattg caaggtggga tgcgatacca 180

aatgagacac ttccagagta catgaaagca ctttattcta ttatatatga cacatcaaatt 240
gaagttgctg aacacgcttt gaagaaacat ggttgtagta tgcattatct tctacaaaaa 300
tcgtgggtatg acatatgcct ggcatTTTTg gtggaggcga aatggcacca tggaaactat 360
agaccaagca ttcaaaagta tctagagaat ggatgggtat catcttcagc aacattgttg 420
tttgttacat gcctttcgca atgcttga 448

<210> 5909
<211> 409
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-G6

<400> 5909

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tgcgctctgag gaaatctaca cgggggccag cagagagggtg aaggaggaaa ccgggggtcga 120
caccgagttc gttgacgtcg ttgctttcag gcatgccac aacgtggcgt ttcacaagtc 180
cgacctcttc ttcactctga tgctgaggcc tgtgtcagat gagatcaaga ttgacgagac 240
agagattcag gcagcgaagt ggatggcgct ggaggagttc gtgaagcagc ccttcattcca 300
ggaagaccac atgttccaga agatcatgga catctgcac cagcgcctcc gcaagtgtca 360
ctgtgggctg acgccgcacc acgtcgtctc caagtctgac gacagaacg 409

<210> 5910
<211> 441
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-032-Q1-E1-G7

<400> 5910

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aacctattga caatggcccc ccgatattgc ccgaagccta cttggatata tctggaagtt 120
ctattaaccc cagtgagaga acctatccag aggagatgat ccaaactggg atatccacca 180
ttgatgtcat gaattccatt gctcgtggac aaaagattcc actgttttct gctgctgggc 240

tccctcaciaa tgaaattgct gctcagattt gtcgtcaggc tggctctgtg aagacattgg 300
 agaaaggaaa gcatgctgag ggtggtgaag atgacaactt tgctattgtg tttgctgcta 360
 tgggaatgaa catggaaaca gctcaaatcc tcanacgtga ttttgaagag aatggttcca 420
 tggagcgggt cacccttttt c 441

<210> 5911
 <211> 390
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-032-Q1-E1-G8
 <400> 5911

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 acggacacct ggcaccgctt ggagcggagc agcgggaggt tcttgcgcag gttccgactg 120
 cccgagaacg ctaagacgga gcagatcacg gccgccatgg agaacggcgt gcttacagtc 180
 actgtgccga aggaggacgc caagaagcct gaagtgaagt ccattcagat ctccggctag 240
 acctcggtct gcggtcgtcg tacctgcgtg gtttgaggaa cggcagttcg cctcggtcgt 300
 tctgtgaaat aaaattgggt tacaagaatt atggcgtttg tcaatatggt cctaattgtcc 360
 taggatggtg gaatgtggtc acaaactttg 390

<210> 5912
 <211> 378
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-032-Q1-E1-H1
 <400> 5912

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 cctattgaca atggcccccc gatattgcc gaagcctact tggatatctc gggaagttct 120
 attaacccca gtgagagacc ctatccatag gagatgatcc aaactgggat atccacgatt 180
 gatgtcatga attccattgc tcgtggacaa aagattccac tgttttctgc agctgggttc 240
 cctcacattg aaattgctgc tcagatttgt cgtcagagcg gtcttgtgat aacattggtt 300
 aacggaaact atcttgctgg tggatgaatat gacaactttc ctattgtgtt tgctcccaag 360

ggagtgatca tggaaca

378

<210> 5913

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-E11

<400> 5913

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gggcggatag tgtggccagg tctgtccgca tataatttca gttggacaga cctcaggatg 180

gtgccctggc gtagcaccga tgagtgcga aggaggcgcc tgcacctttt cgcttctcgc 240

tagcttcatg actgctgatt gtgtaagggt gcggccatga aaggtagat tggctcgcgg 300

tcatgaaagg tgagattggt ctgcggcctg atgtgtatat aaaatttttg ccacgaatga 360

ggcgctgca cct 373

<210> 5914

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-E12

<400> 5914

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tggtagcagc ccggcaagtc ggagtacttc gcgtcgtcgt ccacgctgtt cgtggtcgag 120

ttcatcctgt tccactacgt ggagatccgg cgggtggcagg acatcaagaa ccccggcagc 180

gtcaaccagg acccatctt caagagctac agcctgccgc cgcacgagtgc cggctaccgc 240

ggcagcgtct tcaagccgct caacttcgcg cccacgctcg aggccaagga gaaggagctc 300

gccaacggga ggctggcgat gctggcgctc ctgggcttcc tgattcagca caacgtcacc 360

ggcaaggggc ccttcgacaa cctgctgcag cacctgtctg accca 405

<210> 5915

<211> 370

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-E4

<400> 5915

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acgggagcct ccttgacctc cggggcaagg tgttcacgtt cgggctctcc ctgttgaagc 120
tggacatcgg gcaggagtct gaccggaaca ccgacgtgat cgacgccatc acaacgcacc 180
tcggcatcgg gtcgtaccgc gagtggcccc aggacaagag gcaagagtgg ctgctgtcgg 240
agctgcgagg caagcgcccc ctgctgcccc cggaccttcc ccagaccgac gagatcgccg 300
acgtcatcgg cgcgttcac gtcctcgcg agctccccgc cgacaagctt ccgccctaca 360
tcctctccat 370

<210> 5916

<211> 371

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-E5

<400> 5916

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tgagctcgtg gacatccaaa tcgaggagat tgctggggtc gccagaacg tcacttcacg 120
ttgcaaggat aagatgacag agctggtggt tcaatgaatc tgggtgaggt tcctacttca 180
aacgatgtta aaatgctgtc gtagcttata tgggtgaggtc tcttttatgg gttggcttct 240
tggtagaaaag ggaatgtttg gttattgcac tgtcatcgta gtgttagaac caacacaagc 300
ataggcactg agtagattgt cacggcagat tattatgtac ttcaattctg gaatatttga 360
tggaatgct a 371

<210> 5917

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-E8

<400> 5917

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 gcgctcacca gggagatctc cttcggggat cagacgggtg cgcggccgc ggccgagacc 120
 gagaggcctg ccgccgtgag gatcgacagc gagacgcttg cgcagaacag ggacagcgcc 180
 atgcagcggg acagggagaa gaagaagaac cgcaggtacg agaagcacat ccggtacgag 240
 tcgaggaagc tgcggggcga cacgaggaag cgggtgaaag ggcggttcgt caagtccacc 300
 gaagcactca acgccgccag gtacggcgga tgaagcagcc atatatatat gcatggcctg 360

<210> 5918

<211> 289

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-E9

<400> 5918

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 cgccgtcagg atctacatcg agatgcttgc gcacagcagg gacagcgcca tgcagctgta 120
 catggacaag aagaagaacc gcaggtacga gaagcacatc cggtagcagt cgaggaagct 180
 gctggcggac atgaagaatc ggggtgaaagg gcggttcgtc aagtccaccg aagcactcat 240
 cgccgccatg tacggcggat gacgcagcca tatatatatg catgggctg 289

<210> 5919

<211> 365

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-F11

<400> 5919

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 gatcgacca tcggagcatg ccggagtagt tcctgaggac tatctgagag aatgccccga 120
 agacggcaac agggaagcca ttacgatatc caggttcatg ccgaagctga gacacctcga 180
 gctgaggttc tcgaagctga ccgccgtcgc cctcggtctc atccctgaag gatgcaagga 240
 cctggaggtc ctggacctgt tcggctgctc gaaccttacg agccggggaa tagaccaggc 300
 cgctgctagt ctgaagagtc tgggtgacgct ggtgaagccc aacttctaca tacctcgctc 360

ctcct

365

<210> 5920

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-F2

<400> 5920

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gtttccactc agatccaat tggcaacaag tactatcttg gccctgctcc tctgcaggat 120
atggcaaggc aaattgctac agccaatggc cctactggct ataataggga ttacctgttc 180
tcaatggaga aggcattagc cagcattagc cacgaagatg attcgatcat agagcttgca 240
aacgaggtga ggaaggtgct caacagaaca aaggagacca agatcactgg tgccaatgct 300
tccatgaaat cacatgcccc tcttgtgcac ctgtccgcgc ttccagaagg caccgttgtg 360
gactcgagat agcgacctct actcggaatt tactttcagc tcttgcattg ttgtggttgt 420
ggccatcatg tactgatttt cc 442

<210> 5921

<211> 289

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-F4

<400> 5921

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acgtactaac ttggaactgc acctctgcat gatatcaca cggagattgc taaaaccaat 120
ggtcctactt gctataatac ggattaaatg ttctcaatag ataatgcatt atgcagcatt 180
agtcaacaaa atgattcgat tatagacctt tcaacagtgg tgctcgacagt gatcaacaca 240
gcactcgaga cgatgatttc tggtgccaat tcatcgacga aatcagatt 289

<210> 5922

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-C5

<400> 5922

accacttgca catgctgttg gagcgggtaa tctgtcacta gaattagagg atcttttcatt 60
tcgttacttg tttcctcatt cctatgacca tggtgatcag tggttgagaa gccaagaagg 120
tgactgcaag gctataataa atttgtacaa ggagcagttg cttcaagcac tgcaggctga 180
taatgagttg aggaggattg cacaggacat ctcaattcaa gggagggtata aaagccgttt 240
cagtactatg aagaagctag taaaagatgg acggaagcca gaagaagtta aagacattct 300
aggtttgagg gtaatcttgg agcctcgggtg tgggtggcaat tcattctgatt ggggccctag 360
ggcttgccac aggacacatg aaattattca agctatgtgg aaggaaatcc cgggtagaac 420
aaaagattat a 431

<210> 5923

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-C7

<400> 5923

aggacgcgtg ggatgggttca gaagtgcaag gatgctggtg caaccctggt tatttgccag 60
tggggttttg atgatgaagc caatcattta ttgatgcata gaaatctgcc agcagtgaga 120
tggggttggtg gtgttgaatt ggaactgatt gccattgcta caggagggcg gattgttccg 180
agattccaag agttgagtcg tgaaaagctt ggaaaggctg gattagtcag agagaaatca 240
ttcggaacaa caaaggaccg gatgctttac attgagaagt gtgccaatc tagagctgta 300
accattttca tccgtggggg aaacaaaatg atgattgagg agaccaagcg cagtcttcat 360
gatgctcttt gcgtagcaag gaatctgatc cggaataact cgattgtgta cgggtggcggc 420
tcaaccgaga tatcttgc 438

<210> 5924

<211> 232

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-C8

<400> 5924

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aatgaaggaa catacatcag ctgagttgtg aaaatggtag gcatgcagtg tgaggatctc 120
cgtctctcac tgtccagtga gaagaacgga acatataggt atagctgctg agtggagtgc 180
gtcctcctga tacttggctt ttgcgaataa aaggagtgcc tgctgttgtc at 232

<210> 5925

<211> 376

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-D11

<400> 5925

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acttctccag aaaggttatg gtttgggata tggtatttct ctgttcattg ctaccaatat 120
ctgtgagaat atcatctgga aggcatttag cccacaacc atcaacagtg gtcgtggtgc 180
tgaattcgaa ggggctgtca ttgcactgtt ccatctgttg attacgagaa cggataaagt 240
ccgtgctctt cgtgaggctt tctaccgcca gaaccttcca aatgtgacca atttgcttgc 300
cactgtcttg gtattcctca tagttatcta tttccaaggc ttccgtgttg tgcttccagt 360
gagatcaaag aatgct 376

<210> 5926

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-D12

<400> 5926

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cgtgggctgg aagccagccg agcttcccc ttcggctgcc gtttctcca gcaagctctc 120
tgcacctccc atggccgtg agctcccaac cagggtgtcc caagccctg tgctcggcgt 180
ccttcttcca cctccggtg acctcctgt gcatagtgcc ccttcacct tcggccgcgc 240
cccctgcaca gcgacctgt cgcccttccc tctcttccc tagtgcgga gcaaggagcc 300

cctgctcgga ctgcagccac ggcgtccaag tctctgtgca gcgatgccgg tccaaaaact 360
gcagccccgg cacatcgccc ggcttccctcg ctgctaccgc tgcgcgcatg cca 413

<210> 5927
<211> 371
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-D2

<400> 5927

aaaatggtgt ccagcacatg agcaaggtaa aaatgattgg gtgcagtgca gatccgacaa 60
gttcatgtaa tgcaagtcac ctctcatgat aggaacttct ccaggggaat atatctgaag 120
cacaggacga cacgtacaag taatgtaagc cagtctcacg taatggaaat ttctccatgt 180
ggatgtggtc aaagcatagg attttttttc tccaattgtt aactgtacgc gaatggaagc 240
gacagatcat tcgtaggttg tgagggcttc aaagatcatc tgctgctgta catgttttgt 300
tgctgtcttg tgaacatata tgtcttggtg tttctcaact ggaggaatgg tgttaacctg 360
ctgtatcatt t 371

<210> 5928
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-D4

<400> 5928

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ctcgccggcc tcgtcctctc cgccccctg tccgaagcag ctaccaagc ggcgaccgac 120
cttcgcggcc tcgcccagc agtcgtcgcc cagctccagc gctaagttca ggctcctctg 180
cctcctccat gacaagtccg cggcgccaac gtcgtcggtg cagatgcaga gctcgcaactt 240
gcagaggctg gcgacggtgt tgcagtgcgg agccgtctgg gcagctgttg aggcgccggc 300
ggcgctggcg gtgaccggcg aggaggacat cgaactgcta aggattctgg ccgccgctcg 360
cgggtgttcg cttcttctac ttctctgctg ctctctcggg gatcatgaac tggatgaggc 420
tgaagtggta c 431

<210> 5929
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-D6.

<400> 5929

cggacgcgtg ggtccgtgtt taacgggctg agagagagaa agagaacaga gcgagagagg 60
gggaggacga agccctccgc gtcgtctcct gctgttccat cccacatcta ttctgcctcg 120
gcttgacact tcgacctcgc tgaaagttct gacctcaaac tgaaaggggc ctgtgaagcg 180
tttccttgcg gcagtgcaat ggaggtatct ggcaaactcg tgattgctga gccagcaat 240
gtgattttct tgtccgcaat ccttaacaca gaaggatcaa accctagtca caagtgtgac 300
aagaggtgcc agaacgagaa cttttttggg aacatgtacc gttgcaaact gactggaacc 360
actcacatct gtgacaaaaa ctgtaaccag agaatcctct atgacaacca taactcgctc 420
tg 422

<210> 5930
<211> 439
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-032-Q1-E1-D7

<400> 5930

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ggccgactgc cagaagacga tagcttact gagcagccag ctgaaatcgt tggctgattt 120
cgacgaattc cccctgaaa ctgagaccag tggcgtgac tcagacgacg cctgggacag 180
cgatctgaag cttctccaac ccgcaagcta tcccacgcag attggctgtt tggcagtcac 240
atgattcacg atcctcgttg gcaagtggat agcgaaactg tttttgcttg gcttccgccg 300
catgattgct gtgatgagat tgccatgatg ttccaccaca tgtcatatag agttaagtta 360
ataggtgagc aaatgttcat atggaagctg tttatanagt tgtttggtga agcctcaaag 420
ggactcatat tgaatatta 439

<210> 5931
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-D9

<400> 5931

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gataagcccc gctcgtctag acatctctag ttcacgtgac ttgaatgggt ttaactaaag 120
tgatttttat acaagcggcc taaaaagctg gaaacagtag tctgcatacc ttccgggtggc 180
caaaagctga gtgcccatat ggcacgcaca tgacaaaaat attaatatat tatgttttat 240
ataaatctat agaatacaaa tttattgtta cgttggcctt tcaatataat tagttaggat 300
agttatttaa attttttata taaccattac aaaactaatc aatcaaaaag attcaaaacc 360
ttattatata tttgaattat atcttaattg ttaaataaaa tttttaaaac tataatatat 420
aat 423

<210> 5932
<211> 391
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-B10

<400> 5932

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gtcactggct ggtagcctga gtgtgagtga gtgatcgagc tagctgagct ccgatacctc 120
ctagctagga taccgccata ccacaagtct tcttcacaag tttaggagtg acagcaacaa 180
gagatcgatg gcctctgcca ccgtgctcaa gtctctcttc cttcccaaga agtccgaatg 240
gggcgccacc aggcaggccg ccgcgcccag gccgccacc gtctccatgg tcgtccgcgc 300
ctccgcctac gccgatgagc tcgtgaagac cgcgaaaacg atcgcgtcgc cggggcgggg 360
catcctggcg atggacgagt cgaacgcgac g 391

<210> 5933
<211> 388
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-B11

<400> 5933

accacgcgtc cgatcccacc aaaaatgagc accgaatctc tcgtcttcaa gggcagcctc 60
gtcggccaca aggatggcat caccgcgac gccacctcgt cggagaaccc cgacatgac 120
cttaccgctt cccgcgacaa gaccatcatt atgtggaccc tcaactcgtga cgattcgtcg 180
ttcggatacc ccaagcgtat cctccacgga cacaaccact tcgtctctga cgttggtggt 240
tcgtctgacg gtcaattcgc tctctcctcc tcgtgggaca agaccctccg tctttgggac 300
ctcaacacgg gacttaccac ccgtcgcttc gttggacaca cttcggacgt tctctccgtc 360
tccttctctg ctgacaaccg tcaaactcg 388

<210> 5934

<211> 369

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-B12

<400> 5934

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aaggcgcagg ccaaggccaa ggccaagccg cccctccct cctctcctct cctctcctct 120
cctttcctct ccaactctctg gcagccaaag gcgaggccga gatcctgcgc gcggaggatg 180
ccttcaggt ccatgagccg gctgtccgtc gactccgcct cgggcagcgg cggcggcggc 240
tgccgggagg ccgagccggt gctctgcgcg cctcggccgc gcagggccca gcagcagctg 300
gtccacgtcc acccccgagg cgcgcacctc atcctcggcc cgcgcacctt ccttctcaac 360
gaggtaccc 369

<210> 5935

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-B2

<400> 5935

acagcggaca cgctcggcct cccgttcgtg cgaccgtatc tgagcggacg gagcgcggag 60

gacttcgcgg gcggggccaa cttcgccgtg ggcggcgcca cggcgctcag cccggacttc 120
 ttccgtgcaa ggggggtcca caacatggga aaccgagtgg acctcgacat ggagatgaag 180
 tggttccgcg gcctgctcga cctactctgc cccggcaacc tcgccggttg ctccgatatg 240
 atgaaccaat ctctcttctt agttggagaa atcgggggca atgactacaa cggacctctt 300
 ctttctggag ttcccttcga ggaaattcgc gccatcactc cgagtgttgt tgcgaaaatt 360
 tcct 364

<210> 5936
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-B5

<400> 5936
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 aagttgctgc aagcagaaaa ctggagccta aagacaagta agtatacgct gaaagtcagg 120
 gagataaacg accggttgat gatggccgag cgagcgttca ccaaccgaga aggactggtc 180
 gggagaccat ggtacaagca tatgatatat gcatcatcgg atcaagacga ctgggggacc 240
 aaagccttcc ctggtatagt ctcgccatg gacaaggcta agaagtccaa cacaaccgag 300
 acgtggcgac tgctgcagca cgagatttac agggttgcc gggctgtgtc caaggcttct 360
 gcagtcctgg atggtaaact aacatgatgt gcacgtgcac tgcagatttt cattccattc 420
 tacatag 427

<210> 5937
 <211> 422
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-B7

<400> 5937
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 aaccaaactt tggacgggaa cacatagatt tctttggtgg aggaaggagg agggcaacaa 120
 gaggagggtta caggtagccc aatagatcta ctgctgttga gggagtgtgat gcaaagctga 180

gttgctgcgc gttggctttc tttagagatg gcttcagctg gtgttgcccc ttctgggtac 240
aagaacagca gcagcaccag cattggtgcc gaaaagttgc aagatcacat gaacgagcta 300
aagattagag atgataagga agttgaagca accataatta atgggaaagg gaccgaaact 360
gggcacataa ttgtcaccac tactggtggc aagaatggtc aaccaaaca gacagtgagc 420
ta 422

<210> 5938

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-B8

<400> 5938

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cctacaaatt caaaagtgc cttgaggctg tgaaaacact gagagcacag cccaatgcta 120
atgaccaata cttgccccca tttgtgatag ttgatgacag cggcaaagct gttgggcctg 180
tattagatgg tgatgcagtt gtcactatca acttccgggc tgatcgcatg gttatgcttg 240
ctaaagcact agagtatgca gattttaaca attttgaccg tgtacgtgct cccaaaattc 300
gatatgctgg gatgcttcag tatgatggg agttgaagct tccaagtcgc taccttgctt 360
cccaccagag atagatagaa catctgggga gtacttgggtg aagaatggca tccgcacctt 420
tgcttgct 427

<210> 5939

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-C1

<400> 5939

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catcagtggc aatcaaaacc agtagcgtag tgcgtgctcc gtagtacttc actggcaaaa 120
tcagcatggc ctacgaggac ttactcact tcaagagatt acgttagagt tcaggcgctg 180
gctgggttgc tggccacgct ttattaatga gttcagttct aaaccctgc tgaagcccag 240

gcagtgtcca tgtctctacg agatagttgt gccagggca agtggacgtg caggtgtgca 300
 gcgcacagcc ttgttggtt cggcacagac ccagcttcga attcgtgctg gtgctgcgca 360
 taaagatgga acttgtttgt gtccagcggg cgagtgctg gtgcctgctg 410

<210> 5940
 <211> 392
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-032-Q1-E1-C12
 <400> 5940

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 taacttatta agtttattga aatacattat cggttatgtt cgctagtga cgcacgaggt 120
 tagcttaagt ttaccagctt atatggtaa gttcgacgat tttttttatc cacgttcttt 180
 caccggtttc ttgtgtgggc ggcaaccaa ttgtctgggt ttcaaaattc gcgtcgcggt 240
 ctccgtcatt cctaactccg gcgacccgct ccggtgttgg tccgaactcc agttgcccaa 300
 ctcgatcgag gtcccggcaa gcagattgaa ataatccctg gccatctct cgtttccatg 360
 ggttggttca agctccgtag cctcccttgt cc 392

<210> 5941
 <211> 434
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-032-Q1-E1-C3
 <400> 5941

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 cctccctccg ggcaaccttc ggcaacctcc ccttcaaaaa tcaaccaagg tcctcccggc 120
 cccttccaaa ggccccttcc aaggacaaaa tcggcccccg ggaacaattt gttcgaggac 180
 ctcaaaacga agtgggaccc cgttgaggac aaccaaccg tcctcttgta cggccgcngc 240
 gccgtcgctg ccctatggct gacgtccgtg gtcgtgggcg ccatcaacgc cgtgccgctg 300
 ctccccaaaga tcctggagct cgttgggctc cgctacaccg ggtggttcgt gtaccgctac 360

cttctctttt aaggaaagca ngaaagagtt tggcgccgac attgagaact ttgaagaaaa 420
aaattaactg gaac 434

<210> 5942
<211> 359
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-031-Q1-E1-H10
<400> 5942

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gcaggaggga ggacaagaag aagccgatgg cggttgtgag cggcagcggc gggaggctga 120
accctggggc ggagcccttc gtgccttccg gggcgcggtta ccgcggcctg cggaccgtgg 180
aggcgacgcc ggagcaggag gtggaggact tctccccga gtggtggcgc ctggtgtccg 240
cctccccggc cttccgcgac cgctggctgc gcgagtagc cgcgctcggc ctactcgacg 300
ccgaggacga cctggacgac gacgtcgaca gcttcctccc cgacgacttc ttctcgct 359

<210> 5943
<211> 415
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-031-Q1-E1-H3
<400> 5943

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tgaacaggga tctcctccat attagttagc aggtatgata atcctcccag tgggcaggac 120
atgtcctact acgatcatgt gcagaagcgc catgaggaga agggctgcct atatgcatgc 180
ctgttactg cgtgctgctg cttctgctgc ttcgagacct gtgagtgtg cctcgaggcc 240
atctgctgct gctgctagtt ctgcttggag ggcattggcg tccatcatcg tggagatgtg 300
gccatgcggg acaccaccg ccgaataaaa tgctgtactt atatgcacgc acgttagaaa 360
tgcattagtg tctgtttgat gtgacctgt gtgtgtgcgc gcgcatcttc atttg 415

<210> 5944
<211> 434
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-H4

<400> 5944

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atagttgggc ccataccagt agatgatgga aatggaaaag aagtagcaac tgaaattgtt 120
acaacatgg ttacaaacaa aacattctac actgattcca gtggacgtga tttcatcaaa 180
aggataagag attatcgatc ggagtgggaag attgaagtgc accagcctat tgctggaaac 240
tattatcctg ttaatcttgg catctatgtg gaggatggca gcaaagagct gtctgtactg 300
gtagacaggt caattggagg ttccagtata aaggatggac aaatagagct aatgctacac 360
aggaggctac tccatgatga tgggaaaggc gtcgccgagg cgctaaatga aacagtctgt 420
ctcgataagc aatg 434

<210> 5945

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-H5

<400> 5945

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aggcggagtt caaggtgccg gcgtcggttcg ggccgggtggg cgcggtgctg gtggagaacg 120
agcaccacaa ggaggtcttc atcaaggaga tcaagctcgt caccggcggc gacagcagca 180
ccgccgtcac cttcgactgc aactcctggg tgcactcaa gtctgacaac ccggagaagc 240
gcatcttctt caccctcaag tcatacctgc cgtccgacac gcccaagggg ctggaggacc 300
tgaggaagaa ggacctgcag gcgctgcgcg gcgacgggca cggcgagcgc aaggtgttcg 360
agcgcgtcta cgactacgac gtgtacaacg acctgggcga cccggacaag aacccgg 417

<210> 5946

<211> 365

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-H6

<400> 5946

agaagactgt cttcaacgga tcacactgcc gctccccac gctaaatttg ggggctacag 60

tgcacacgct agccgatcaa cgggtcacgc taccaggcgc tctacgcgga tgtgccccct 120

agccagcttc tctctcccc tcgttctgtg gtgcctctct caccctctct aatattgttc 180

acgtgggccc acttccaatt attagtagat gaaaaattga taggaggtga aaagtaggta 240

tagaaaatga tattttatgg ttgtagtggg gtatagggga aggatttagg gggaaacgct 300

gtacagagtg gagatatagg ggggaagaga acgctgacgt ggcacgtgag tgggatatag 360

ggaga 365

<210> 5947

<211> 380

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-031-Q1-E1-H7

<400> 5947

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ttctgttgtg gctggtttcc agtgggcac gaaggagggt gcaactggctg aagagaacat 120

gcgcgggatt tgcttcgagg tctgtgatgt cgttcttcat gctgatgcta tccacagggg 180

tggtggccag gtcattccaa ctgccaggag ggtcatttat gcttctcagc tcacagccaa 240

gccaaggctg ctggaaccag tttacctggt ggagatccag gcccagaaa atgcactggg 300

tggcatatac ggtgttctga accagaagag aggacatgta ttcgangaga tgcaaaggcc 360

tggtaccccg ctctacaaca 380

<210> 5948

<211> 295

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-031-Q1-E1-H8

<400> 5948

gaagaagcgg aggaggaagg acgggcggcg caggctcaag ctgtcatggc tggcgtggcc 60

gtgggtcacgg agaagcgaca aggggggacgc gggcgggcgac ggggacgaca gcagcaagga 120
 ngggaagaag cggaggagga agggagggcg acgcccgtg cgcctctgc tgacgacgac 180
 gacgtcgctg cagctcaaga aggcgctcgc gtcggtcgctc tccggggaga gcgccctact 240
 gcctgcgccg gccaaagtga gcagtttcgg cgacgccaag aagcaaagca accgc 295

<210> 5949

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-A1

<400> 5949

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 ctttttctcg tgccaattac taatgttacg gcattattca ggacaaaact ttactggaag 120
 gtctgtgtgt caatgcattc tgggaaagga atgttgacga gtctgtgcgc caaggagatg 180
 caaggccatt tgtggaggaa gctgtgctgc aagtatctga ctgggggtttc agcctatctg 240
 acatccaaat gcagaagaaa gaggcctcgc gcttttttga actcatcaag tctctgttca 300
 atcatgctga aagagagtgg gtgggatttc tgggcccaat acatatatgg caggggatgg 360
 atgaccgagt gatctgcgcg tcagtggctg aatttg 396

<210> 5950

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-A2

<400> 5950

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 attaaatgtc aacatttgcc ttttcgcgtt ccaattacta atgttacggc attattcagg 120
 acagaacttt actggaacgt cctgtgttca atgcattctg ggaaaggaat gttgcagagt 180
 ctgtgcagcc aaggagatgc aaggccattt gtggacgaag ctgtgctgca agtatctgac 240
 tgggggtttca gcctatctga catccaactg cagaagaaag aggctcaagg cttttttgaa 300
 ctcatcacgt ctctgttcaa tcatgctgaa aaacagtggg tgggatttct gggcccaata 360

catatatcgc aggggataga tgaccgagtg atctcgccct cagtggcaga atttgtgcog 420

c 421

<210> 5951

<211> 371

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-A6

<400> 5951

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tgagtaccgc tgcttcgtcg ggggcctcgc ctgggccacg gacgaccact cctccacaa 120

cgccttcagc acctacggcg aggtcctcga gtccaagatc atcctcgatc gggagacgca 180

gagggtccgc ggcttcgggt tcgtcacctt ctccacggag gaggcgatgc ggaacgccat 240

cgagggcatg aacggcaagg agctggacgg ccgcaacatc accgtcaacg agggccagtc 300

ccgcagcggc cgtggacgca ggggccgtgg gtacggtggt ggccgtggag gcggcggcta 360

ccgcggtggc a 371

<210> 5952

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-A7

<400> 5952

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ggccgagatc aactttctct ggggtccacaa gaagctccga ttcaagcgcc tggcaaccgt 120

gctcatccgg gaagtcaccc gccgcgtcca acaggagaac atctggcaag ctgcatacac 180

cgcggggatc gtcttcccaa ccccatcaa cacctgccgc tactggcacc gattcctcaa 240

ccccaagaag cttatcgatg ttggattctc tcgccttggg ccgcgcatga ctatgagccg 300

cacgggtccgg ctatacaagc tgctgatgc gccgctcacc cctgggtttc gcaggatgga 360

gctgcgggat gtccctgcgg tc 382

<210> 5953

<211> 267
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-031-Q1-E1-F4

 <400> 5953

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 ctgctgcatc tattaaggca atggcacatc aaattccaag ggatcctgca ttcagccggc 120
 tggccgcgca cctaccgaca tgtgtttaaa gcacaagaga acacggcaca cctccattaa 180
 tgctcaaca atacactgaa tcagtgcctc aggtcatgga attccccacac tttaggacca 240
 ccgcagatcc tcaggggaat tctcgca 267

<210> 5954
 <211> 383
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-031-Q1-E1-F5

 <400> 5954

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 gctctccgcc gccgtgcccc ggttcacagg cctccggggc tacgccgcgc ccagggtccgc 120
 ggtggcagcg ctgccgtccg tgaggggtggg caggaagagg tcgtcgtcgc agggcatccg 180
 ctgcgactac atcgggtccg ccaccaacct gatcatggtg acgacgacga cgctgatgct 240
 gttcgcgggg cggttcgggc tggcgccgtc ggcgaaccgc aaggcgacgg cgggggtgaa 300
 gctggaggcg cgcgactccg gcctgcagac gggtgacccc gccgggttca acctcgccga 360
 cacgctggcc tgcggcgccg tcg 383

<210> 5955
 <211> 415
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-031-Q1-E1-F6

 <400> 5955

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cggggctgcc tgtcgacacat gctggcggac tccatccacg cggacgtgac catcaacacg 120
acggacgggg tgctgaaggc gcacaaggcg gtgctggcgg cgtgctcccc cgtgttcaag 180
agcatgttcg tgcacgacct gagggagaag gagtcgtcga cgggtggacat cggcgacatg 240
tgcggtggagt cgtgctcggc gctgctgggt ttctgtgtacg ggacgatcga gcagggggcag 300
ttctggaagc accggctgcc gctgctggcg gcggcggaca agtacgggat cngcgacatc 360
aaggactgct gcnanganag cctgctggag gacataggct cgggcaacgt gctgg 415

<210> 5956
<211> 414
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-F7

<400> 5956

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agctgccata ttttgcccat ctgaaatgta atcatagatt cacatttggg cccatcctaa 120
ctttctctag gttccggtct ttgttatgcc tactgtgaaa atgcaaaact gtctttcctt 180
caaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaataa aaaaaaaaaa 300
aatacaaaaa aaaaaatact gctacaaaaa aaaaaagggg ggccccccca aaaatttcca 360
actttaactg ccggtaacga gaactttaag cccctttaaa aggggtccca aaat 414

<210> 5957
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-F8

<400> 5957

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gatacagggg agccgccggc tcgcgcacac cgatcagttc aggttccttg acaaggcagc 120
gtcgggtggag ccatcggacg acaagtcgcg tccggcgagc gcgtggcgtc tgtgcacggt 180
gacgcaggtg gaggagctca agtgcgtgct ccggctgctg ccggtgtggg cgagcgggat 240

cgtgttcgcg gcgggcgtaga cgcagatgac caccaccttc gtcttcgagg ggcacacgct 300
 ggacccgtac gtggggcggt tccgcgtgcc cgcgcgcgtg ctctccgtct tcgacacgct 360
 cagcgtcatg ccgtgggtgc cgtcttacga ccgcttggtg gtcccgtgg cgcggc 416

<210> 5958
 <211> 371
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-G10
 <400> 5958

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 cacagaaagt gtgcactcag attgggtctct gtgtatttga tgggtgcccat tctgtcagca 120
 atccaattga atctgttggt gagaaacaga agcgtgggtc tgatcttttc tgtactgctt 180
 gtgagatggc tgttgtctgg atacagaatc agctccgtga aaacaagaca aaagaactca 240
 ttttgaatta tgctaatacag ctctgtgagc gtctccctag cccaatggc gactcaactg 300
 ttgattgcca tcagatctca aagatgccaa atcttgcatc caccatagca aacaagactt 360
 tcaccttaac a 371

<210> 5959
 <211> 296
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-G12
 <400> 5959

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 caatggagta tctatgcaac ttaccaccac ataggtatga agctgttttc gcgaaagaaa 120
 ttccggagac gatcactggc gatgcgtttt tagagaagta tggagaccac aacgatgcgg 180
 taacagaagt tgacccaaag cggctttact gtgtcaaggc tcctactaga catcccatat 240
 acgagaactt ccgagtggag gccttcaaag cgttgctaac agctgcaaaa acagac 296

<210> 5960
 <211> 420

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-G3
 <400> 5960
 agccgcaaga aaggaaacga gagagaaaat cgagtgaaaa ggaagggaaa caacataaca 60
 aatcgcaaag aggcgtcttc caagtttgta gggttaccgg atcggaggag catccccgcc 120
 taggtcacca cagccatggg tcgaggatcg ctaggcaagc ttgcgtcgcg cgccctctcc 180
 gtcgccggga gatggcagca ccagcagctt cgccgcctca acatccacga gtaccagggt 240
 gcggagttga tggggaagta cggatatcaac gtaccagggt gtgcggcggc ggggtccgta 300
 caggaggtca atgacgcctt gaagaacatg ttccccagtg agaaagagat agttgttaaa 360
 agtcaaattc ttgctggtgg ccgagggtcg ggaactttca aaagtgggct gcaaggaggt 420

<210> 5961
 <211> 428
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-G4
 <400> 5961

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 cataacaaat cgcaaagagg cgtcttccaa gtttgtaggg ttaccggatc ggaggagcat 120
 cccgccttag gtcaccacag ccatggttcg cggatcgcta ggcaagcttg cgtcgcgcgc 180
 cctctccgtc gccgggagat ggcagcacca gcagcttcgc cgctcaaca tccacgagta 240
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 gtccgtacag gaggatcaatg acgccttgaa gaacatgttc ccagtgaga aagagatagt 360
 tgttaaaagt caaatccttg ccgggtggcc cagggtggg aactttcaga agtggggctg 420
 caaggagg 428

<210> 5962
 <211> 367
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-G5

<400> 5962

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gttgtgggtcc tcccgggteta catcgtggca atgctcgtcc tgatagcttc agcatcactc 120

cgggtattgt tccagagcga cgtgcaccct gcagtgggtt accttgggtct ctaccttgcc 180

gccattgccca gcgggtggcgt gaagccctgc atttctgcct tcggggctga tcaatttgac 240

agcaatgacc cggcggagct ggtgaagaag ggctccttct tcaactgctg gctccagggt 300

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agctgtc 367

<210> 5963

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-G6

<400> 5963

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acgaatgaga agggcgagtt ctgggtggca atccactgcc gccgaagtct gtacgcccgg 180

cttatgagcc gccatgtcaa gctgaggaag tttttgctca gcctcccgat ccccgccaag 240

taccactacc tgatgcagat cgggtggcagg ctccaecggg tcatcatcaa gtacagccca 300

gagggccagg tgcttgacat cttggaggac accaagggcg aggtggtgag agccgtcagc 360

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gtctttgacc tcgcg 435

<210> 5964

<211> 415

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-031-Q1-E1-G7

<400> 5964

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 gtgatgaaga gcagcctcgt cgtgcactcg aggccgaggg gcctgtcagg cgctgctgcg 180
 ctcacgagggc ggcccggccg gttcacctgc aaggccatcc agcccagaaa ggcaacgtac 240
 caggtggtgc agcccatcaa cggcgacccc ttcacgga gcctggagac gccggtcacc 300
 tcgagcccg cgtggcggtg gtacctctcc aacctctcgg cctaccgcac cgccgtgagc 360
 ccgctgctgc ggggcgtcna agtcggcctc gcgcacggct acctcctcgt ggggc 415

<210> 5965
 <211> 350
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-G8

<400> 5965

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 tcttatattc atccattcat tcagaaaaag atatctcatc attgggacat tactttcaat 180
 cagaataagg aagctctgaa tcactatata caagagtcac catatccttc ccttgagaaa 240
 gtaccaactg attcctccgt agaagtagaa ggtacagccg atacaactgc aacagggtcaa 300
 gttttgaaag caaggctttt aaaaattctt gagcattcac ctgatgatga 350

<210> 5966
 <211> 338
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-G9

<400> 5966

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 aggaggacag ccggagtccg gcgttcgctg gggtagtggc gaacacgtgc cgcgcgatcg 180
 agagcgagtt catcgacgtg gtggccgggg accctgagaa ccgaggaaag agagtcttcg 240

cagtcggggcc gatgaatccg ctgcttaacg tgaccgcgcc gacagcggga cagagtgcac 300
ggcacgagtg cttggactgg ctgcacaagc aaccgccg 338

<210> 5967
<211> 257
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-F2

<400> 5967

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tgaggttcca aaggaattaa ggatgttccc aaaatggaag gttccttggg ttccggttgt 120
aaaaaacagg tgcaattttg aggctgatgg aaaccgtaat taccoatttg gccagggtcc 180
gggacaccag gttttgaaca attttggaag actccacctc tttgatttgc caaacggca 240
aaccctttcg gcttccg 257

<210> 5968
<211> 414
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-D8

<400> 5968

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aacagcaaca acggcggcgg taataccaac aacaacagca acggcgtgga ggtgaagagc 120
tacttcaaca agtccgccgg gagggcggcg aacaacaaca acaacaacag cagccacgcc 180
ggcggcggca acaagaaggg cggcgccggg gagtacggca ggaagaagca cgccaagagc 240
gagggcgcgg cggcggcggc ggccacggac aagcagcggg tcaagacgct gccggcgtcg 300
gagggcgtgc cgcgggggcca ggccatcggc ggggtacatct tcgtctgcaa caacgacacc 360
atggacgaga acctcaagga ggaagctgtc cgggctgccg tccaggtaca ggga 414

<210> 5969
<211> 369
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-D9

<400> 5969

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ggccaagata ttttccatcc ttatgctcct tgctctttct gcatgtgttg ctaacgcgac 120
catttttcct caatactcac aagctcctat agctgccctt cttcccccat accttccatc 180
aatgaccgct tcagtatgtg aaaaccagc ccttcaacc tacaggctcc aacaagcaat 240
cgcaacaagc aacttacctt tatcaccctt gttctttcaa caatgccag ccctatcttt 300
ggcgcagtca ttggtacaaa ccatcagggc acaacagctg cagcaactcg tgctaccagt 360
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<210> 5970

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-E11

<400> 5970

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cggcggcgcg cgcaacatgg acgatgaaaa cctcaccttc gagacctccc cggggggtcga 180
ggcgcgcagc agcttcgacc agatgggcat caaggacgac ctctccgcgc gcatctacgg 240
ctacggcttc gaaaagccct ccgccatcca gcagcgcccc cgtcctcgcc atcatcaacg 300
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<210> 5971

<211> 348

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-E12

<400> 5971

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attttttttg caacatgttg tcagtacaca tggccaggac tgatgatccc ccacgtctt 180
 agttctctca gctttccgca tttcaactgt gatcttgtaa taagatgtcg gatctcatgg 240
 attaccaatg taatacacca attatgggtt cttgatctga tggttggctt tctctgataa 300
 aaaaaaacia taaacaagcc taatcagaaa aataaaaaaa aaccctaaa 348

<210> 5972
 <211> 353
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-E3
 <400> 5972

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 cgctacactc tggaccgcca ggcctgcgg cttcaccggc tacttcacta cggcaacctc 180
 gtcaaccgtg gaaggggtccc cctcaagaac gaggagcagc tcacggacgg gtacctagac 240
 accatcgctg actggatccc gggcgcgccc aaggacctgc ggctccggga cttcccagac 300
 ttctgtcgca ccacggatcc gaacgacgtc atgtcaact tcttcatoca cga 353

<210> 5973
 <211> 409
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-E5
 <400> 5973

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 gagcattctc ttactacatg atgtaaattg tgaatctcca tcaaggctgg cttatggctg 180
 aagagtcagt atcatagttt cctttgatgg gagaggacag caaagccagc taatctcgct 240
 atccaagaaa tcggctagta gttttttccc ttttgaacct tgtcacgatg ctttgtcttc 300
 tggataaagt tcacgcaggt ttcaaataag aaatcacatg gactatcaga cttgtatgga 360
 atatggatgc tgtacaaaga tttctaagt acattagtct aactttttt 409

<210> 5974
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-E6

<400> 5974

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gcgggcgaca agaagcgagc ctttcgaacg gacggacgga tgatcgttgc cggtgatacg 180
atgcgcgtca accgctggcc atgcgaatat cggatatatt gtgacacggc ggaccgatgg 240
ttgcgggtccg acgcggagtg cggcaagcaa tatgtcggaa tagaatgggt acgtacacaa 300
gctatgctgt tgaaccggcg gacgatgacg ggcgcactcg cttccctgcc gatcgcgtcg 360
cgggcaacgg cccggccccg ttgcggatcc gttgctcttc gcctatttcg gaaccgg 417

<210> 5975
<211> 369
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-E9

<400> 5975

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ctgaggttgc tcgtcgagta tgctgcagcg gctgggcatt gaagcttaga ttttggtggt 180
tttggtgatg tgccctccac catttgcccc tttgttgtgt atagaacctg cgttattgtg 240
ctatgctttg taatgtcttc ctcagctgga cccttagaaa gcctactata tttgcctatg 300
taccctcgt gtttaatagt ttgagcagca taataatcta tgggtgtagc actgttattt 360
gcatgggtt 369

<210> 5976
<211> 359
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-F10

<400> 5976

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tggcagatgc ctcaggggtgg tatagatgca ggggaagaac caagggcggc tgccttcagg 120
gaattgagag aagagactgg tgtcacatcc gcagagatcg tggctgaggc tcccgtctgg 180
ttaacatatg atttcccgcc agatgtcaga accaaactga atgccagggtg gggaaccgat 240
tggaaggcc aagctcaaaa atggttttta ttaggctta ctggaaatga cgatgagatt 300
aaccttaatg gtgatggatc tgagaagcca gagtttgggtg aatggacatg gatgacacc 359

<210> 5977

<211> 344

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-F12

<400> 5977

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ttttgtggag gggcgatggc ggcggctgat gtggagtacc gttgcttcgt cggcgggctt 120
gcctgggcca ccagcaacga gtcgctggag aatgccttcg cctcctacgg cgagatcctc 180
gactccaagg tcatcacga cggggagacg gggagggtctc gcggcttcgg cttegttacc 240
ttctcctccg agaactccat gctcgacgct atcgagaaca tgaacggcaa ggagctcgac 300
ggccgtaaca tcaccgttaa ccaggcccag tcccgtaggg gtgg 344

<210> 5978

<211> 338

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-C10

<400> 5978

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aacggtcacc ttccaaacgt ctgtaacatg tgaaatctgt ggtggagccg gtgtgcctcc 180

tggaaccaca cctgaaacat gtctatcttg caggggttca ggatttatat tcatgcaaac 240
 cgggccattc aggatgcaat caacctgcac aaaatgtggt ggttctggga aaactgtgaa 300
 ggaattctgc aaggcatgca gaggaacaa agttgtgc 338

<210> 5979
 <211> 334
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-C11
 <400> 5979

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 aggccatcct tccgccgcgc cggactgcac ctaatcttcc ttctccagca gccgggcgtt 120
 cccgtcgtcc tcgatcgtcc cctggactgg atcgcaacgg agatccagct ggacctgcgg 180
 tggtccttc cttttctcga tagcataatg agctcgccag tggagaggtg attcgtcagg 240
 ctggtatcaa gttcctagtc catggtgcct ggatgagcag tagagatgct actggccgtg 300
 gaaggaggag ggttcttctc gtcttcagct acag 334

<210> 5980
 <211> 356
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-C12
 <400> 5980

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 ttccacagtg ctcaattgct cctagtgcga ttattccaca gttcctccca ccagttactt 180
 caatgggctt cgaacatcca gccgtgcaag cctacaggct acaactagcg cttgcggcga 240
 gcgccttaca acaaccaatt gcccaattgc aacaacaatc cttggcacat ctaaccctac 300
 aaaccattgc aacgcaacaa caacaacaac agtttctgcc atcactgagc caccta 356

<210> 5981
 <211> 161
 <212> DNA

<213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-C5
 <400> 5981
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 aaaaataata aaagtcaaag gccaatctta ctcttaattct taaattctcc atatgcctgc 120
 attagacccc attgttcttt tactgcgttt ttctattacc c 161

<210> 5982
 <211> 253
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-C6
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 tcgaagagag gatgtgatca acctgagtta cggataaggg ggaacaaccc atccacacgc 120
 acttctcctc cgacccaaca ttatttggtg ttaactagtt tttcttttct ttatctcttt 180
 ctttcttttg cactctgtac gtgtaatgta atgcagtgta atttaattag tgagagaagc 240
 atgacgccct act 253

<210> 5983
 <211> 412
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-C7
 <400> 5983
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 ctgggccacc gtcgctgccg cctgccgcct gccgccctgc gccaggtgcc aagcagccag 120
 gtgttcttgg ggcccttcgc cggcgacgag caccaccage tgaaagatgg cgaggatacc 180
 gtctctgaag agcctcaatg cgtttccaca tgcggaagag cacttggtga agaagactta 240
 ctctggcgct gttgtgacaa tttttgggct atttataatg attacactgt ttgtgcatga 300
 gctgcagttt tatcttacca cctacacggt gcatcagatg tctgtagatc tgaaacgagg 360

agaaactctg ccaatccata tcaatatgtc atttccttct ttgccatgtg aa 412

<210> 5984

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-C8

<400> 5984

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gggtccccgtg gcactctcga gaagtcgctc ggtcacttgg ctgtctcctt caccaccccc 120

aagaagaacc tcatcaagat cgagctccac cacggctccc gcaagagcgt cgctaccctc 180

cgcaccgtcc gcaccctcat caacaacttg atcatcgggtg tcacaaaggg ctacctgtac 240

aagatgcgtt acgtctacgc ccatttcccc atcaacgtca acgttgagaa gaacggcgag 300

accgatcagt tcgaggtcga gatcaggaac ttcatggcg ataagcttgt gcgcagggtg 360

gtcatgaagg ccggtgtcca acttgaaggc tgctatgaac cagagggatg agctccac 418

<210> 5985

<211> 259

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-D10

<400> 5985

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaata aaaaaaagaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa taaaaaaagg gggggccgct caaaagggtc aatctttttt 180

tccgtttcaa tgcaagttaa aaacttttca aaattgcccc aaaattcaat tccaggggag 240

ttctttttaa aacttgat 259

<210> 5986

<211> 331

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-D11

<400> 5986

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gcgctctaca attcgaaagc cgcggcgagg cgaattcagg ggacgggaag ttgaattcta 120
tcaactgaccc ccaaagctcc ctagtccta cacaactccg tctgggtacgg accatgccat 180
ttgactcctc ccgatctgta agggcgacac gcacctttgc ctcgccttca acttgggtga 240
ttcagctggg ttagggcggc tgaaatttgg tttactgcac caacgtggta gggggaatct 300
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<210> 5987

<211> 327

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-D12

<400> 5987

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acacagttcc atctggagtt tcctgggagg tgaggccaga tgtagacgct agcgaggaga 120
agaatgaaaa acaagagtca tgtagacca cagtggacga agcgcacgaa caagggaaaa 180
ctgagggaca gattgaaatt caggtagcat catcgatgga tatgataagt gatgaagctt 240
ttacagctga caaccaggag catggaattg gagaatcaaa tggttacttca gtggaacaag 300
tgactgaaga agagaaacca gcacatcg 327

<210> 5988

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-B8

<400> 5988

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tgctgatccg tacaagataa catttcaaatt tggacatgaa aagttccatg ttccttggct 120
ttatgttata aatcgcaaaa cctctgaagt tccactgacg gatttccatt tgaagtactc 180
tggaatgat atacttgggg tgacagctaa agttgtggac atgcctcacc actacgtgga 240

agttcatcct gacataaaga agaatttctg ggatccacag aattggccaa aatacgttct 300
 tgttagatat acatgggagg agcaatcaga gatagatggt actggaggat tttatgtgtt 360

<210> 5989
 <211> 399
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-031-Q1-E1-A6
 <400> 5989

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 tagtaaaact gtgttttttt aaatatccat gctgaagggt tctaacataa tcatgttaag 180
 tttttatgaa aaaaatttgc ttaaactatg actgttccaa tcagtttttt acctaaagaa 240
 ggtattcaca agaatcttgg catttaacag acctgcacac cttgacttta tgaaaaggga 300
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 angatgctaa ctgggatcac ctcatgtac gaccgcttt 399

<210> 5990
 <211> 409
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-031-Q1-E1-A7
 <400> 5990

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 attaccaacc tctattttat atcccagctt ctctacagga agtacagtgg aaacttcctt 180
 gttaaccttc ttgggaagtg gaaggagtct gaatactctg gccattctat tctgtttggt 240
 ggtcttgctt actatgtaac tgccccatca agtttggtg atgtccttgc aaatccattc 300
 catgcactgt tttatgtggt cttcatgtg tcagcctgtg ctctgttctc aaagacatgg 360
 attgaanttt tcgggttcat cagcaaagga tgttgctaag cagctcaag 409

<210> 5991
 <211> 412
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-A8

<400> 5991

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 aatgtacatt tctatgctgg agagtgggat gaactcccaa caattctctc agttgtgcag 180
 ccacctgcag caccaacaaa cctcagcttc tctgaggatg attttatgga tggctgcagt 240
 agccatgatg gaagcagtgt agttgggtcat gactactgcc ccaggagatc taggaagctt 300
 tctggtagcc gtgcatggga gagagctagt gagaccgacc aggcagatag tggctatgat 360
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<210> 5992
 <211> 363
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-A9

<400> 5992

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 cggccgtctt ggataagggc gccgtccaga agaggagcct gctgctggcg acgggctccg 180
 acacgagggg agtcgctcag gttagggtcca gcgggatcga gaggaacagg gtgggtctgg 240
 gatgtgaagc cgtcaccggg caagtcaagt aggtcaacac ggacaccttc tggcctatcg 300
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 tgc 363

<210> 5993
 <211> 228
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-B12

<400> 5993

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agaaccagct ttgtttgtac cgtgcttcac tttgtaattg gtgtcacttt tctcggtagt 180
tatgccaaag gaaagcgac cagaaaataa tgtacatatt tatcttcc 228

<210> 5994

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-B5

<400> 5994

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tcgagttcca cgtcgacaag atcccgtcag ctcttgaggg tcatgtgaaa acaaaaggca 180
caatttacct gtccaatata aggatggtgt ttgttgccag caagcctgtt ggcaacttct 240
ttgcttttga tatgccactg ttgtttgtgc atggtgagaa gttcaatcag cccatatttc 300
actgcaacaa catctctgga ttcgttgaa cagtcgttcc agacaatcag aacaggggccc 360
tgtactcaac tcacaccttc aagatcttgt tcaaggaagg cggctgtggt ac 412

<210> 5995

<211> 389

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-031-Q1-E1-B6

<400> 5995

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 aaatagtacc tttcctcgcg gcgcccgcc 389

<210> 5996
 <211> 397
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-H8
 <400> 5996

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 ctgcgccgacg acccggaacac cgccgccgag ctcaagggtga aggagctcaa gaacggccgc 180
 cttgccatgt tctccatggt cggtctcttc gtgcaggcca tcgtcaccgg caagggccccc 240
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 acgaacttcg tccccggcaa ctaactgact gagcaacgcc gtacatgtgt actaccatca 360
 gacccatcca ttcgtcgctc cgtccgtccg tccgtcg 397

<210> 5997
 <211> 262
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-G2
 <400> 5997

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 gatactctcg atcggcgcgt catacgtgga atgaacttgt ttgtatcaag ctatctatac 180
 ctcaatgctt ctctacctgc cgccgccgca ccccgatatga tatgtgatac acagctggga 240
 tggatatactg atattttggg tt 262

<210> 5998
 <211> 191

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-G3

 <400> 5998

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 gcgtgggtccg tgctgtggtg cctgctttga ttataaatag ccgtgatgat gcatactctt 120
 gttgagcaat gaattcgacc gaccatattt gaacttccta tgtacgtgtc acgtatctca 180
 agtttggtgt c 191

<210> 5999
 <211> 420
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-G4

 <400> 5999

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 acgcgcgccca ccgcgcgcgc gcgcactcta cgcccgctcg agaagagtcc ctttcggtgc 180
 cgtgatccta tccgcgcgcgc gaccgggggc tagggttcgc gcggcgcggc ctccgcgagg 240
 gaatgttcat aaccattgcc tgttgacatc gtctagtctg aattcaaatt ctttgctatg 300
 tcctccatgc aattgtgtc aaatggcttt ggccgacaca agaattgctt accagcctga 360
 agttgacaag catgctggag ttctggtatg gaagctttga tactatTTTT gcatgggatg 420

<210> 6000
 <211> 409
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-G7

 <400> 6000

 cccacgcgtc cgcagctcgc agaagaagg ccccgcgggg ggcgtgctga tcccaagg 60
 cgggtgggag ctggacgagt ccatggacga ggccggcccg cgcgaggccg cggaggaggc 120
 cggcgtgctc ggcgagacgg gccccgcgt gggccgctgg tgctaccgca gccgcagcta 180

cgacgccacg tacgagggct tcgtgctccc gctgcgcgtc accgcggagc tggaccggtg 240
 gcccagagatg gccgcgcgcc gcacggagtg ggtctccgca gccgaggcca tcgcgcgctg 300
 gcccacaacc tggaatcccc aaggccttca accgggtcccc gaaaacgttc ccgggtcccgg 360
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<210> 6001
 <211> 423
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-H1

<400> 6001

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 ctgccacctc aaatccccgc gaacctatct ttcccttccc ccgatccagg cggttctctt 120
 cccagaagcc agcccagaat ggtgggatcc gacgcgctgc agtccatcgt ttacagccgt 180
 gggtcactcc gcctcctcga tcagaggaag ctgccgctcg agatggagta catcgacgtc 240
 aagagttccg ccgatggctg gaatgcaata agagacatgg ttgtccgtgg tgctccagca 300
 atagccatag cagcggcact agcattagcc gttgaagttt ctgatttaga ttttattggt 360
 acgcctgaag aaacagcttc ttttgtttca aagaaattgg aataccttgt atccagccga 420
 cca 423

<210> 6002
 <211> 348
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-030-Q1-E1-H10

<400> 6002

ggtccacgac gcgtccgaag gacagagaaa gataagaaag gcggtggtca acttgtgtcc 60
 tgaggtgccc gtanaagccc aaggacaaga aacaaggaga agagtagatc tacatctact 120
 ccaccgatga gcgcgtctcg gttcatcaag tgcgtcaccg tgggggacgg tgccgtcgga 180
 aagacctgca tgctcatctc ctacacatcc aacactttcc ccactgacta tgttccaact 240

gtgttcgaca acttcagtgc caatgttgtg gttgacggga gcactgtcaa cttgggtctg 300
tgggatacag cangacaaga agatacaata gactgcgtcc gttgagct 348

<210> 6003
<211> 368
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-H12

<400> 6003

acgttgccga atattgaaga gcttactggg gtaaatacaa cttgggtatc caccttgatg 60
gctcaacatt tactagctgc tgcagaccgt tatgcattgg agagattgaa gttgctctgt 120
gaacttaagc tgtgtgaaga tgttgcaata aatacagtgg caaatacttt ggcactggct 180
gaacagcacc actgttatca gctaaaaact gtttgcttga aatttgtagc tttgcctgaa 240
aatttgaaag ctgtcaggca aaccgatggg tttgattatt tgcaacaaag ctgcccattc 300
ctcctgaccg agcttctcga gtatgtggcc aacgcaggag agcactccgt gagcccctgc 360
ttgtattc 368

<210> 6004
<211> 309
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-H2

<400> 6004

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cagtgaaaac atgttcttag aaactgtatc tgaaatcatg gaccgtcacc tcgacaagga 120
gtgagtttag aaattcagaa taactgatct agttgttcca gctgtatccg gtttgttgtt 180
tctattgttg acaagcactg atcaacagac taataatttg atttgtttgt acctctcaaa 240
tgtttctttc ggttgtaatg ctcgagtact ttgcttagca cactttgtga ataatatatt 300
tgttcagtt 309

<210> 6005
<211> 427
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-H3

<400> 6005

cagatccaag aaacgcataa cggttcgctt ctccggctgt cctcgcatgg cgctcggcag 60
accggttgct tctcgtgtgc gcgtaggctg attccgtgtg cctgctcctt gtctggattt 120
cttaaggcgt ggagccagtt gggccaggga agatttaacc agtcgggccc ggaaggagcc 180
taagggttgg atctgatgct accaggtcgc tgagcatcgc tactgaaggg ggcagcttct 240
gattccggca gatggctcct gaaatgatgg aggaggggca atcagcttcc tataccgtgg 300
atgacgctct cttgtcatca ggttttggga ggtccagat attgattctt tcatatgctg 360
ggattggctt aattgccgaa gcgatggaaa tgatgctgct atcaatttgt ggtccatcag 420
tacagct 427

<210> 6006

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-H4

<400> 6006

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cccgtcatca ttgttgggtg gcaccgaggt gtttgagctc ggtccatcat tatatgtcgt 120
agagcttagg aaatcccacg gagactctac gttgtataga cagctgtgcg aaaggctctc 180
cgatgagcta ggtgcctgca agacagacca gatcgcgagg actgaatcat cgagtgcga 240
cctctcgagc gtcgatggcg aagcgttccc tctatctggg ttctgatcat attgctttcc 300
ctgtgttgtt ttgggaacag gggatgagga acatgctcgt tcctgatgca attctagatt 360
aggatcatga atatagtgtg caaagccagc ggcggcggcg gtgcaaatta gccaccgggt 420
tgaat 425

<210> 6007

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-H5

<400> 6007

agacactagg acctcccctg cccccacgag atttgtatct gtacctgact acgatgagga 60
gtacaatgac tgtgatgatg atgactatga tggaaccgaa tatggcatca accatcctgt 120
taatatgggg aaaggaagaa gggcgagccc atcaagctcg tcttcaccgg caagaagaag 180
ggaatcactc cgtcgccctc cttcagcgcc ctcgacaagg agggcgagga cccacccccg 240
tctgccgcag ccgagccgaa gccagcaac gatccaccgg aggacgacat aagcacttta 300
taaaaaataa ttctcacagg tggaaccttg ttgcattcta cagatttagg caaaatcctt 360
acgggttgcc ttttgattta actaccattc aaattaccaa ctcttgacca gatttattag 420
ttccaattgc ggtc 434

<210> 6008

<211> 213

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-H6

<400> 6008

tctcctgccc ccacgggatt tgtttctgta ccttcctatg atgacgtgtt ctttgactgt 60
gtttctgatg tctatgaccg tcccctctat ggcgtctggc ttectgtttt catctggact 120
ggctaatgg tgagcccatt atgctcgttc gtcgtgtcca ttattgagga aactgctca 180
tcacctcctt catctccctc gtttgtgacg ccc 213

<210> 6009

<211> 342

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-H7

<400> 6009

accacgcgtc cgcaatccca ttgaatcctc tgccaataaa gaaacatgag tgcaatcgg 60
tgctatcca catttgctct gaagaagact tcttgaaaga tgtcatgcag tttctacttc 120
agagggggcca catccgactt gtacctcagg gaggactggc agaatttcct gacgcagtgt 180

taaattcaaa gcgctcttgat ttatataact tatacaaaga ggtggtatac cgaggtggct 240
 tttatgtagg caatggcata aattggaaag gtcaaacttt ttcaaagatg cacaaccata 300
 cagttacaaa caaaatgacg ggttttggga aacacctaaa aa 342

<210> 6010
 <211> 437
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-030-Q1-E1-E9
 <400> 6010

gggtccacgc acgcgtccgc accacgagtc cgcggcctac ggcaacaaga agttcgagac 60
 gctgtcgtac ctgccgccgc tgtcgacgga cgacctgctg aagcaggtgg actacctgct 120
 gcgcaacggc tggataccct gcctcgagtt cagcaaggtc ggcttcgtgt accgcgagaa 180
 ctccacctcc ccgtgctact acgacggccg ctactggacc atgtggaagc tgcccatggt 240
 cggctgcaac gacgccaccc aggtgtacaa ggagctgcag gaggccatca aatcctaccc 300
 ggacgccttc caccgcgtca tcggcttcga caacatcaag cagacgcagt gcgtcagctt 360
 catgccttac aagccccggg cagcgactag accgcgccnc gcggccgggc ccccgccggc 420
 tagctatagc tcctgcg 437

<210> 6011
 <211> 425
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-F1
 <400> 6011

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 tagatgtatt aatatttggga atctcaataa acccctcttg ttttccgtct gctaacatat 120
 tcgtatggaa cccagcacia agctcaacga gaataatgat gcaatgatac atacatgtcc 180
 acagtccata cgtttttttt gaagaaataa cacttttcta gatgagataa ttagcacatg 240
 tgcaattagc caattactgt cttgtgttat gtgagccatt ggatttgatt tttatatacct 300
 acaaattgat tcatgttaca cttgaccttg agattcatgg aaccaattgg ttgagctgca 360

cattcaaatt tgatttggtt taatctaatt aatagcaatt tggtatcagt ggaaggacaa 420
gattt 425

<210> 6012
<211> 294
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-F11

<400> 6012

ggtccacgac gcgtccggaa cgcaaggag ccaaaggaa agttacaagc attgtggcta 60
agaaggacgt agcttttagct acacggattg aagaggccat gaagaaaaat gagagcttgg 120
aagctctcac gactaacaat gtcagaaggc caaccagctc gcagagtgtg aacacgaaag 180
ggaggccctc aaggttgggtt aagacttcaa atgctcttaa agttgtcagt cagaagggtta 240
gaaggggagt atcgctatct aacaagtcaa ccccgggctc caaaggatac aact 294

<210> 6013
<211> 244
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-F12

<400> 6013

ccaagcgtaa gcttacgctt attctggctc ctagggccat aactttacct aggcggattg 60
ttcaggccat gaaaaagtat gggaacttgg tacctctcac gagtagcact gtcaaaacgc 120
cagccagctc ttagagtgtg agcactacag ggaggccctc aaggttgggtt atgacttcaa 180
atgctcttaa agttgtcaat cattacggta taatgggagt atcgcatct agcaggatcat 240
cccg 244

<210> 6014
<211> 366
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-F2

<400> 6014

accacacgtc cgccacgcg tccgcctacg cgtcggcgga ctctgtgtgcg gacgcgtggg 60
ggcatgggac tgggcccccc ggccgcgacg aatatactca ctctgttctt catacgtagc 120
catatccggc aggcggcagt acctgtatat ggttttagct atacgcgacc tcagttcggg 180
cgcaagctac aaccccgacc aggcgagaag aagcatcgct agtgtgacga gcttaaccag 240
caccagcaac gtgatccaaa tccatggaca accagccact gccctactcc acaggccagc 300
cccctgcccc cggatgagcc ccggtggccg gcattcctag cgtgcccggc ctcccacccg 360
tgccgc 366

<210> 6015
<211> 395
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-030-Q1-E1-F4
<400> 6015

cttcggccaa gccttcgggg tggtaaccaa aattcgtaa gaacctgtaa acccaccggt 60
ttccccgtct ccggcccttg cttagctatg cacccttgct ttcataaaag tgccaagtcc 120
ttgaggatga ctttggtcag gaagcagcag agtatctaag tgaatgtttg cttagtagct 180
caaagcaata ccgggcaatg atcgaagaac atgatacttc tggggggaaa tcaaaaggac 240
aaggaaccgg aaatgttctc attgttactc ttgttgatgc ggagacagaa agtagcataa 300
acgctaccat gcttgaggaa gggcttgccc ggctcgaaag aagcaagaga tgggacacta 360
gggagaggaa gacggctctc cagaacctgg aacag 395

<210> 6016
<211> 376
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-030-Q1-E1-F5
<400> 6016

atgctgacaa ggagaatata gcagcaaggt tcgcacaaat gtggaatgaa attgtcacca 60
gctttcgaga tgaagatctt atagacaata gggagaagga gctgctactt gttccttatg 120

tgtctgacg gacccttggg gtcgtgcagt ggcctccatt tttgcttgcc agcaagatcc 180
 cgatagcagt tgacatggct aaagatagca atggcaaaga ccgagatccg agaaagaggc 240
 ttgacaatga ttattaatth aagtgtgcaa ttgaggaatg ttatgcatca ttttaagaata 300
 tcatcaatgg ccttgttcag gggtaaccan agaaaagggt cataaataag atattttag 360
 aagttgaaaa atgcat 376

<210> 6017
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-F6

<400> 6017

catctgcgta cacggtctcc ctcttctgt cagtagtaga gtgagagtga ggcagcgagt 60
 aggagacaag gggaaatggg gaaggagcg caaggagcg atgcggcggc ggcgggaggc 120
 gaggtggagg agaacatggc ggcgtggctg gttgccaaga acaccctcaa gatcatgccc 180
 ttcaagctcc cggcgtcgg cccttatgat gtccgctgc gcatgaaggc agtggggatt 240
 tgcggcagcg atgtgacta cctcaggag atgcgcatcg cgcacttctg ggtgaaggag 300
 ccgatggtga tcgggcacga gtgcgcgggc gtggtcgagg aggtgggccc cggcgtgatg 360
 cacctgtccg tgggagaccg cgtggcgtg gagccgggcg tcagctgctg gcgctgccgc 420
 cactgc 426

<210> 6018
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-F7

<400> 6018

ccgggccgac ccacgagtc gcttgtttct taccaaagct ggcacattga aaccgattgc 60
 tattgaactt agccttctc cgagcaaggc aggcgagccc cggccaagca aggtccttac 120
 tcctcccgt gatgctacct ccaattggct atggatgctt gccaatgctc atgtcagctc 180
 caacgacgcc ggtgttcacc agctcgtaa tcaactggctg aggacacatg ctgtaatgga 240

gccgttcata ttggcatcgc atcggcgtat gagcgcaatg caccagctct tcaagctcct 300
gcacccccac atgcggtaca ccttggagat taatgcgcta gcactgcaga gcctgatcag 360
cgcggaacggt gtcacgagat cttgcttcac ccttggcccc gtctccttcg agatcagcgc 420
tgcatactac 430

<210> 6019
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-F8

<400> 6019

actggattca gtttccagat cgtaaataca aatcttgatg aagttagccc tcgtgctcga 60
cgaagaagtg ctttacttac atggcaacat atagcatcgc tgccacccaa tttgcctggt 120
atctattgtg gaggcttcaa tacacagaag gaatctatga ctgggcgggtt tttgcttggc 180
agatccagag aacatggtgt tgttggtgat atgagagatg cttggccaaa tgctcgagt 240
cgaaaaaatg tttcactaat acacacatat catggattta aaggggagaa acaaggtgcc 300
ctggaatttc ttaaattgat atttagagct ctttgccctc gctgggatcg acagacacag 360
gacttgcata tcgactggat cttgtttaga ggacgccccat tggttcctgc actttgtgag 420
gtcattaatg acaatat 437

<210> 6020
<211> 460
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-030-Q1-E1-F9

<400> 6020

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tcggcatctc gccctcccgt cctgtcccgt cgcgtccgttc tccgattggc cgccgccccg 120
ctcgccctcg tcaacaaaag cccaccgcaa gcgagcgagc gagccaccct ccccgccgcc 180
gccaccgccc ccgtcccgcc cccaccccga ctctctctga ccgcccggcg ggggtgcccc 240
ggctccacct ccggcgacga caccctcccc gccgcgcgcg cccccaccgc ctgctccggt 300

ttgcgggggt agccgggggt ccggcctcgg cggttttcaa agccccctcc ctcaaacag 360
 gatccaaaat cccgtcctag acttcttcta cctcnccttc cagaacttcc tcttttggca 420
 tcccggacgg tcgatctoga ccccttcga tttegattca 460

<210> 6021
 <211> 371
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-G1
 <400> 6021

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 acggcagttg cggccaccgt cggacctgag gactcgtga tccggaacgt gattctgcgg 120
 tggagatgat aacaatctgg agctgaacgc ggagtccac ttctgaact acgtgcatcg 180
 gtacggcaag tcgtacaatg acgccgacga gcactcgata aggtgtccg ttttcaatgc 240
 caacctactc cacgcactcc ggcaccacct gcaggaccag tcggcggagc accgcgtcac 300
 taagttctca gaactcaagc aggcagattt ccgccggacg tatctcggac tccgcaagta 360
 ccggtgcgct c 371

<210> 6022
 <211> 460
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-G11
 <400> 6022

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 ttccccgat cctctcggg acaccagcga tgggttcccg ctacgaggtg gaggtcaccc 120
 tcggctccgc ccgggacctc aagaacgtca actggcgcaa cggcgacctc aagccctacg 180
 ccgtggtgtg gatcgactcc ggcagcaagt gctcgacctc cgtcgacctc gacaacggcg 240
 agagcccggc gtgggacgag aagctgctcg tcccgtccc gccacacctc cgctcgacg 300
 acgccgtcct ctacgtcgac gtcgtccacg ccaacgcgc ccagggcgtc aagccgctcg 360
 tcggctccgc ggcctcccg ctccgcgacg tcctcgacga cggcggggtc gggggcaagg 420

cctcgcgcag cctccgcctc aggcgcccct cgggcccgcc 460

<210> 6023
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-E8

<400> 6023

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gccatatcaa gtcccagggtc aagtttcttg acctcctgtc ttaactaatg caccaaattt 120
tcacccggtg tgtactgtgc agttgaggcc gccacaaat ggtggactag ctgtccagac 180
aatgggtagt gcctctcaag ttgcttttgg ttaccagca gtccagctac caacacttga 240
aacgggctct tcatgggcat ttggtgctcc acctcaggct ctgtcttctt ttactgcaaa 300
agacaaagct gatcaaacag gaaccaagca agttgacgat ggcaagaagc cccaggaggc 360
agggtgcttc tcgtctgtc atgtgaaga tgagaaaaag gctgatagag gactctctct 420
tatgggttct gccataa 437

<210> 6024
<211> 448
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-D4

<400> 6024

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gcatctggct gccctacaaa accaaaaccg gctacaacaa catttacaag gattaccgca 120
acacaaccct gaacggcgct gtagagcaga tgtacaatga gatggcttct cgccaccgcg 180
tgagggtccc ctgcatccag atcatcaaga ccgccacagt acatttcaag ctgtgcaaga 240
gggacaacac caagcagttt cacaacagt agatcaagtt cccactcgtg taccgcaagg 300
tcaggccgcc gaccaggaag ctgaagacca cgttcaaggc ttccaggccc aacctgttca 360
tgtgatttag ctgtgggtcag tgtatgtgat cgtaagaatc tgtgttttaa gttttgacgc 420
taagacttgg gtgggttgaa gattcaac 448

<210> 6025
 <211> 383
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-D5

 <400> 6025

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 tggcggcccg gatggtggac gcgatggtag tctcgacaat tctggcaggt agtcttctaa 120
 aggggtgcct caactcggga gacgggtcac ctcttcgcc gtctctgct ccataaagag 180
 gatcaatacc gagatgcctt acgggattgg aggtgggatt accgttgacg tgaacgtcaa 240
 cgggaaaaac ggcaaggga agggcatggt aaaattcgtc tacaagtacg gcgcgaactt 300
 cgacgggtac atcccaatct ataacgaaga tctctggtct gataacgggg atgtcaacgt 360
 cgatgtaaac agtgggctta aga 383

<210> 6026
 <211> 433
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-D7

 <400> 6026

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 ggaggcctcc atggttccag tcccagggat ccaccatcag caccagtggc agtggcagtg 120
 acagtggcgg aggtggacct tgagatggct ctgcctcctg catatgcacc tgcccatgcg 180
 tagagagagc actcccttc actatcatcc agccgacgag ttcactctag ctccagctat 240
 acatccagtc tgttgtgtga tattatatac agatccactg tttgttttct aagacctcga 300
 tgtatactga aagaaaagta aagacagcag aacagacgca taaaggaata gattagatta 360
 tatagccgat ttcgttccac tatttgtttt ttgagaatgc tgtagtattt aagatattgt 420
 gggttttttc agt 433

<210> 6027
 <211> 432

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-D8

 <400> 6027

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 gcccatggcc atgtccacgc aagcctccgc cgccacgcgc cacctgctgg ccgccgcctg 120
 ggccgccggcg gcgaagccgc ggcagctgag ctgcgagctc gcgctgccgt cgtcgtcctc 180
 ccgccggggcg gccccgctcc gcgcgtccac cgaggaggcg gtggaggcg ccaaggggtt 240
 cgtggccccg cagctggacc ccagcacgcc gtccccgac ttcggcgcca gcacggggcg 300
 gctgctccgc aaggcgcagg tggaggagtt ctacgtcatc acgtggacgt cccccaagga 360
 gcaggtgttc gagatgcccc ccggcgggcg cgccatcatg cgggaggggg cccacctctt 420
 gaagctggcg cg 432

<210> 6028
 <211> 367
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-030-Q1-E1-E12

 <400> 6028

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 cctccaattc ttcctaccat cattatccga aaagggtgtta ggatacaagc ggccggcgga 120
 gcaggcggtg gcggcgcgct gctggggcgt cccatggagg acgtgtacaa ggtgcgcgtg 180
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 tcgtggcgca ccgggtggcc ggtgccggat gccgtgggac tggcaggctg accagctcgt 300
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<210> 6029
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<223> Clone ID: LIB189-030-Q1-E1-E2

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aactaaaaca aaaacatggc gtcagtcaca gaa 93

<210> 6030

<211> 458

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-E4

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gaccacgatc atgttctgga cgggtgtacg gcagatgacc accttctcgg tgtcgcaggc 180

caccaccatg gaccgcgcgc tggggggctc gttccagatc cccgcgggct ccctcacctg 240

cttcttcgtc ggtccatcc tgctcacctg gcccgctctac gaccgcctcg tggcgcccg 300

cgcgcgccgc gtcagcggca accgcacgg cctcaccctg ctgcagcgga tcgccgtcgg 360

cctcgcgctc tccgtcgctg ccatggcggg cgccgcgctc acggaggtcc gccgcctccg 420

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<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-E5

<400> 6031

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gcgcgccggc ctgcggcgac gtcataagt tgcagatccg cgtcgacgag gactccgcta 180

aaatcgtcga cgctgcttc aagacctttg gctgcggctc cgccatagcg tcctcgctccg 240

tcgctactga atgggtgaag ggaaaaccaa tggatgaagt cttgacaatc aagaatactg 300

agattgcaaa gcacttgccc cttccaccag taaagctcca ttgcagcatg cttgcggagg 360
 atgccattaa agctgctgtg aaagactacg aagccaagaa cgccaagatg gggcaaaaga 420
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<210> 6032
 <211> 430
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
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 tggccccgga gaagaaggcc ggcgccgagt tcgtcgaggc cgcgggcggag tccggcgagg 240
 ccgcccacgg ctgcagctgc ggtggcaact gcaagtgcga cccctgcaac tgctgatcac 300
 atcgatcgac gaccatggat atgattatta tctatctagc ttgtggtggt ggttgaacaa 360
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 gaganacaga 430

<210> 6033
 <211> 429
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 <213> Zea mays
 <223> unsure at all n locations
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 <400> 6033

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 cgtatggaac ccagcacaaa gctcaacgag aataatgatg caatgatata tacatgtcca 180
 cagtccatac gtttttttgg aagaaataac acttttctag atgagataat tagcacatgt 240
 gcaattagcc aattactgtc ttgtgttatg tgagccattg gatttgattt ttatataccta 300

gaaattgatt catgttacac ttgacctgag attcatggaa ccaattgggt gagctgcaca 360
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 tttacgatg 429

<210> 6034
 <211> 336
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-D2
 <400> 6034

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 aatttaattg aggtaaaagg aaaataaaaa atttttttaa aaaataaaag ggggttttat 180
 ttaaaggttt ttatttttaa tttgtgttga ttgggaattt aaatgttttt aaaaaattta 240
 attaatTTTT atttaaagggt cttttttttt aaaaggtttt tagggaaaaa gccttggttt 300
 ttttaatttt acattttttt aaaaaaattt attttt 336

<210> 6035
 <211> 338
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-B4
 <400> 6035

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 gcgacacctg caacatcccg ttgccgcat ggggtgctgga ggagatgagc agcaaccgg 180
 acatcgtgta cacggacagg tccggccgcc ggaacccta gtacatctcc ctccgctgcg 240
 acacgtgcc ggtgcttaag ggccggaccc ccatccaggt ctacaccgac tacatgcgca 300
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<210> 6036
 <211> 60
 <212> DNA

<213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-B5
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<210> 6037
 <211> 370
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-B7
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 tgccctctcc ttccgtagcc ggatcaacc actcgttcgc ctcaaagcca aaggtatcga 180
 gccggacttc gggctctacg gcctcaaggc gatcaccaag gtcttcaaga gcggcatcaa 240
 cgcgacgccg gtgatccagt gcagcaaggc ccccttcgac aagtacatgc tgttccagct 300
 ctactttctgc gcggcgggga acggcacgtt catcgactgc cccgcgccgc agcagtacac 360
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<210> 6038
 <211> 429
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-B8
 <400> 6038
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 gtgggggtga tctggtaagg cttggttttg ccgaaatatt gtggggggag gaggaggagga 120
 gtgataaggt cgggtggggtt tctatgttaa agtcgtgggc tcgggcaata tgcgattttt 180
 ctttatgcc a tgttttggga aattttgtag ctgcctagge ctcgactgt tgtggtggtt 240
 cattagtacg aagacgaagg ctctgctggc gatgggagtc ctttttcttt ttgttagtat 300
 tttgtttaa actatgtatg accgaattat ttgtcatcct tgactcaatt ctgctgcaac 360

cagttgtatc gtgccatgtg tctctgcagc accggtcggt gctgttctga gtaaaatctg 420
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<210> 6039
 <211> 373
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-C2
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 cttcaacaag tccgcgggga gggcgggcgaa caacaacaac aacaacagca gccacgccgg 180
 cggcggcaac aagaagggcg gcgccgggga gtacggcagg aagaagcacg ccaagagcga 240
 gggcgcggcg gcgggcgcg ccacggacaa gcagcggttc aagacgctgc cggcgctcgga 300
 ggcgctgccg cgggggccagg ccatcgggcg gtacatcttc gtctgcaaca acgacaccat 360
 ggacgagaac etc 373

<210> 6040
 <211> 424
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-030-Q1-E1-C5
 <400> 6040

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 gctaggcagg agggcacagg aaggaggaaa tggcgtcaaa gaggattcag aaggacctca 180
 aggttctgca gaaggacct cccacctcgt gcattgcagg tctgttggt gaagacatgt 240
 tccactggca ggcaacaata atgggtccat ctgatacccc atattctggt ggagttttcc 300
 aagttacaat ccatttcct cctgattacc ctttcanacc accaaagggtg gcatttcgca 360
 ctaagggtgtt ccatccanac atcaacagca acgggagcat ttgcctcgac atcttgaagg 420
 acca 424

<210> 6041
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-C6

<400> 6041

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ggcccccatg cggcgccagc tgctgcgcgc gcaggccacc tacaacgtga agctgatcac 180
gccggagggg gaggtggagc tgcagggtgc cgacgacgtc tacatcctgg acttcgccga 240
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caaggctcgtc tctggctccg tcgaccagtc cgaccagagc ttctcaacg acaaccaggt 360
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<210> 6042
<211> 431
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-030-Q1-E1-C7

<400> 6042

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tttccctcaa tgctcacaag ctctatagc ttcccttctt ccccataacc ttccatcaat 180
gatagcttca gtatgtgaaa acccagctct tcaaccctat aggtccaac aagcaatcgc 240
agcaagcaac atacctttat cacccttggt tcaacaatcg ccagccctat ctttggtgca 300
gtcattggta caaacatca gggcacagca gctgcagcaa ctctgtctac ctgtgatcaa 360
ccaagtagct ctggcanacc tttctcccta ctctcagcan caacaatttc ttccattcaa 420
ccaactgtct a 431

<210> 6043

<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-C8

<400> 6043

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cggctccgcg ctcatcaaga tgctgctgga ggacggatac gccgtcaaga cgacggtcag 180
gaaccccgac gacatggaca agaactccca cctcaagggc ctgcagcagc tcgggccgct 240
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cgactacgcc ttctctgctg ccgccccggg gaacctctcg gcacaggatc cagagaatga 360
gcagatcgag ccgtccgtcc gaggcacgct gaacgcgatg cggtcgtgcg c 411

<210> 6044
<211> 377
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-C9

<400> 6044

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acggttgccc gtgctggtca gaatgggtac caccaccgca ctgagatgaa caagaagggtg 120
tacaagatcg gcaaggctgg acaagagacc cacgatgcct ccacagagtt tgacaggact 180
gagaaggaca tcaactcccat ggggtggcttc cccattatg gtatcgtgaa gggtgactac 240
ctgatgatca agggctgctg tgtgggacca aagaagaggg tggtgaccct ccgccagtcc 300
ctcctgaagc agacttcccg gctggcgctg gaggagatca agctcaagtt catcgacaca 360
tcgtccaaat ttgggca 377

<210> 6045
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-D11

<400> 6045

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actgagtacc cagagcaacc aatgggtcaac cttgagatgt gcatgactgg tctggacacg 180

aagaaagctt cagtcttctt caagactaat gctgatggca acacaacatg tgccaaggaa 240

atgacgaagc tctctggtag ctctgaaatt atccctgaga tggagatctg tgattttgac 300

ttcgaaccct gcggctactc catgaatgca atccatggct ctgcgttctc cacgatccat 360

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<210> 6046

<211> 404

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-030-Q1-E1-B3

<400> 6046

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ctcgcgtcac tgtggctgta caagcagatc cttgatgcca ttgatgcaaa cgactacaac 240

aacttcacca agcgtgctga cgtcggcaat gccagaagc tgctgtcggt accgcttgca 300

tatgcaatgg ctaccgttgc accatgaacc atccgtagat cacatctttt tttttcgttt 360

cgtttcaaac ccacctgtt ttgcccgaag cttccttatt tttt 404

<210> 6047

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-H9

<400> 6047

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cagtgtttat acctcggaac ttagctctgt agataagaaa tgcacaacat tgcccatgta 120

ttccgccttt tttgagagga aagctcgtgg aatctatttg attttttttc tctgtactac 180
caattacaaa gggttgtagg tggagctgtg gaggccagag cgggcaaccg tgtggcttaa 240
cattctacca cgcctagcac tctagcaggt ttcatgaagt ctactacggt ggtgaatcag 300
atcgcacaac tgttgtgttg taggagcgag tatgtgctcg ttttgtcgca caaagatgt 359

<210> 6048
<211> 115
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-030-Q1-E1-A1
<400> 6048

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catgacacgc acccgccgta actcccacag cctgggccac aagtcccgcg gtgac 115

<210> 6049
<211> 386
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-030-Q1-E1-A10
<400> 6049

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cgcacagtgc tatcacgacc ttgccgtacg catggaaccc attcattcta aaacttgacc 240
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aactgatggc atgtaatgcg gccgacatat ccaagctcga gtttcctcgc gatgagatca 360
ttgagattat accctcatcc tacaac 386

<210> 6050
<211> 259
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-030-Q1-E1-A12

<400> 6050

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ccttgggtgt ccttcccggt ccggtcccca agccttagcc caatccttgg gaacaacggg 120

ttattgcccc ccgcggcaac aagcaacaac aagcccttaa ccgggaacaa cccccaccaa 180

aagccacaat tgctccggcc ataaaatggc cagtaccatc cggccaccaa tttcctttgc 240

cacaaaaaga taaaaccog 259

<210> 6051

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-A2

<400> 6051

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aaaacttaac cttgataatt ttgtgcgtag atcgacttg ttggaactgt acacggaaaa 180

tgttgctcac gtaaatagtg atgcttttaa atgattattg gaagtcttga cttcgggctc 240

cgtaatcagg atagcgatgt tgttgagagg tgcttggcac gaataaatgc acctgcttca 300

tacaatttca aagacggatt atgacggata ggaagactga actctcagct catggaatct 360

<210> 6052

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-A3

<400> 6052

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cgctactgac atggacaata tatctctgaa aacttgggat caggaacatg tgcttaccgg 180

cggacatggt cttatggtga atggctacga ccctgtcatc agagctctcg ctcaaggtct 240

agatattcac ctcaaccaca gggtcacaaa gatcatacaa cgctataaca aggttattgt 300

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 ggtactcaat gcaaacaatca tcaagtt 387

<210> 6053
 <211> 203
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-A6

<400> 6053

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 acgtgccttag tatggagctg gagcattcct cgctgtctgg cttcccttgg ttgtagtgcg 180
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<210> 6054
 <211> 360
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-A7

<400> 6054

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 gctgtgagct caatacgtat aagttgtgct gccactaaac ctgcaaagac tcctgctgaa 180
 gaagaatgga aagttaagcg gcaactgcta tcagaaaagc gggtagaag tgtcgatgtg 240
 aaggaagcac tgcgccttca aaaggaaaac aactttgtca ttcttgatgt caggccagaa 300
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<210> 6055
 <211> 328
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-030-Q1-E1-A8

<400> 6055

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tcactgccag ctttgtgttt aggaacgtga tacgggatcg tctttctttt tttttggttg 180

cctgtctttg ttactttgta caaacttcag ttcagtgact cggctctaatt accggctccg 240

attagtgaac tgtttctgtc tgattagtaa gtcacccgac anccataggg tggccggtgg 300

cgctccctcc cttctaattt aacttgta 328

<210> 6056

<211> 384

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-030-Q1-E1-A9

<400> 6056

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agaagcggcc gccgctcaat atgggccagc tcaagctgca gatcgccagg accctgctca 180

gcagcctcgc ggcgcgggtc gccagaacc gggaccgcgg cttcggggaga tagataggcc 240

gtgccgttgt ancagtacta cagtagtagt tagctgaaga catgcgtcgg ccgactggtg 300

gactgtgccg tctgtgcctt tgttcacctt cgtcatcctt taagaaagaa cgtgttgccg 360

tcaaaaaaaaa aaaccaatcc aaaa 384

<210> 6057

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-B1

<400> 6057

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atggccgacg gggaggacgc cgccgccgcg cgccgccggg ccgccatcac agactaccgc 120

aagaagctgc tcaactgcag ggagctagag tcgcgcgtcg gcaccgtgag agaaagcctt 180

aaaactgcaa agaaggattt taccaagact gaggacgact taaagtctct gcagagtgtg 240
 gggcaaataa ttggagaagt actccgacct cttgataatg aacgctttat cgtgaaggcc 300
 agcagtggtc cccgatacgt ggtcggttgc cgaagtaaag tggacaagga gaagttgaca 360
 tctggtactc gtgttgact tgacatgacg accttgacaa taatgcgcac tct 413

<210> 6058
 <211> 401
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-B10

<400> 6058

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 aggcgctcgt cgggtgcaaag aatccatggc atggggaggt ctgttcttgt gcatgggccg 180
 cccacgcgag gagcaacaga agtctgcct tgcagccgct ggtggcttca actacgacac 240
 agctctccaa ggcgccacac gcccaaagtc agtgtctacc ttgacctctg aacaaagctg 300
 gtggcgaaaa taggtgacaa ggattcttac gagcgtggat tctttgtgaa ccgattccgt 360
 gttctggtcg gctcaagttc tgacgccttt gtccatgcc a 401

<210> 6059
 <211> 419
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-B2

<400> 6059

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 taagaaacca cttttgagga gcgacaagaa gaacatggcc accctcttgg cagagtttga 180
 caagattaac aaaaagcttg gctttcgga ggaggatctt cccaagatcg aggaagagct 240
 tgaattggaa attgccaaaa gtgagctgac tgaacttaag aaagaatgcg ttgaaacaat 300
 ggagactcaa ctcaagaggg aggagtttca agatgaggag atgcctgatg tcaggaaatt 360

ggacatcaga aacttcctgt aggctgatc gacgataatc tttgagggcc aacgcaact 419

<210> 6060
<211> 353
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-029-Q1-E1-H8

<400> 6060

ttatgttagc actaactaac caatcttgag gaatgaagtg gtgatagatc aactcagtcc 60
attacactaa ccatacaaat agtgggaaat tagaaatgga gaaaatgagg gactagccta 120
gttctcaaac caagcaccct gttagagaaa catctcattt ggggcaaaca aatagtgtta 180
ctcaagcgca cacagagtag cttaactaa acagtttcac gcaggtcttg catccacagc 240
ttaaagactc caaagtccaa accttcgttc tcaaattgggc ctaaattgggc ttgaacagtn 300
tcattgcact tgataacttt gtcagttagt gttccttttt ttttccaatt tta 353

<210> 6061
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-G10

<400> 6061

gacgcagtcg tcttgccgcc gccgtcccaa acgtccgcgc ggtcgtcctc gatcttcccc 60
taccatcccc acgcgatggc cgccggcgcg aagcccgata ccgccgcgcc cccgcaagcg 120
ccttcggcgg cgaagggggg cttcatgcgc cgcattctcc ccttcctcct cgcgacgaac 180
gtcttcatcg gaggttatgt atttgccaag acctacaaaa gagaccagga aaagaaaaat 240
gctcagacta ctgccgtgc agcattgtca tccccagcaa gtacatctgc caaggctcca 300
gatcctgctc ctgcacctgc gcccgatcg gttctccac ctctatccga agatgagcag 360
tggaatctgt acaaatggat tctggaagag gagcggaaga ttaaaccacg caacgccact 420
gagaagaag 429

<210> 6062

<211> 351
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-G11

 <400> 6062

 agcaaagtaa aacctgtgca tattgttgat gttcctgggc atgctaggct caagcccaag 60
 cttgatgaag tcttgccctaa agctgctggg gttgtcttta ttgttgatgc tcaggatttc 120
 ttgtctagca tgcaagctgc tgcagagtac ctttatgaca ttctgacaaa agcatctgta 180
 gttaagaaaa ggatccctgt gcttatattc tgcaacaaga cggataaagt taccgcccac 240
 tcgaaggaat tcatcaagaa acagttggag aaagaattga acaagcttcg ggaatcgagg 300
 aacgccatat cttcagctga catctccgat gaagtccage tcgggggtccc t 351

<210> 6063
 <211> 407
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-G12

 <400> 6063

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 gctacttgca acagcagctg cttgcatcca acccaattgc tctggcgaac gtagctgcat 120
 accagcaaca acaacagctg caacagttta tgccagtgtc cagtcaacta gccatggtga 180
 accctgccgt ctacctacaa ctactttcat ctagcccgct cgcggtgggc aatgcaccta 240
 cgtacctaca acaacagttg ctgcaacaaa ttgtaccagc tctgactcag ctagctgtgg 300
 caaaccttgc tgctactta caacagttgc ttccattcaa ccaactggct gtgtcaaact 360
 ctgctgcgta cctacaacag cgacaacagt tacttaatcc attggca 407

<210> 6064
 <211> 131
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-G4

 <400> 6064

eggccaacgc ttccggcggac ccttggccgg ccccttgggg aacaaaaag ttttaattagg 60
 ccaatccgca atccaaaccc ggatccaagg ataacaattg cagaaatttg ggaagatgaa 120
 tggttcaaaa a 131

<210> 6065
 <211> 437
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-029-Q1-E1-G5

<400> 6065

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 tatcatgcag atgttcgggc gagggagaag gagttggcgg cggcggagac ggagacggag 180
 accatgggct gctgctcctg cgctcccttg ggcaggatga tatccagatg tatcatcaaa 240
 cgcaacgtag gaagagaacg gcgcatgagg tacgacgaga ggacgggaat ggactatgcc 300
 atggcgtacg ctcccccgca gacatgctac gtgcgcccaa cagacgcgcg caccgtcacc 360
 ttggccacca ccaacgcccc cgccgnacat ccggattcac acccacagcg agcgcacgca 420
 gcgacgaaca tgccgct 437

<210> 6066
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-G8

<400> 6066

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 ctagcactct tccaggggcc acccgctgct ggtggaaaca atggttcatg ggaggctttc 180
 cttcaaattg gtggcaacga ggtgacttcg gcatggcaga atcctgcagc tgaacctggg 240
 aaggctgatt gggagcttgc cctcgtagag acagcaagca acttgtccat gcagaagcca 300
 gcaatgtcag gtggtatgga cccgctgctg ctgaatggta tgtatgacca ggggtgttgtg 360

cgtcagcacg ttagtgcaca ggtgaccacc gggagtgcc a gcagcgtcgc cctgcctgct 420
cctggac 427

<210> 6067
<211> 172
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-G9

<400> 6067

cccacgcgtc cgccgcttat gctctggaaa cccgttgca cctgtgtaccc gcgccttgct 60
acgaaggctc caggtggctt aactccagat gaggccacaa aaatgcgcac gagaggacat 120
cagttaccac caatttgtaa acttgggaaa aatgggtgtt atgccaacct tg 172

<210> 6068
<211> 393
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-H2

<400> 6068

ggccaaaatt ttagccacaa agggcccgac tgacgccaag gttaccaagg tcaacaggcg 60
ttctggcaag gagcttgaga aagagcccaa gttcttgaag aacggcgatg ctggtatggt 120
gaagatgatt cccaccaagc ccatgggtgt ggagacattc tcgcagtatc ctccccttgg 180
taggtttgct gtccgcgaca tgaggcagac agttgtgtt ggagtcacat agagtgtgga 240
gaagaaggac ccgaccggcg ccaaggttac caaggcagct gccaaaaaga aatgatgcaa 300
cctgtcgtta atcctgtatc tgcttttgca atacctgact tgtcactcca tcccgaagtt 360
ttgtatgcgg ttgttactgt tattgtgtac tgt 393

<210> 6069
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-H4

<400> 6069

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 tccccaaaac ggggaagccg ggaaggggaa aaagggtccc aataaaccca aggggggggg 120
 gaacctttcc caataacccc cccctgggcc aattgccggc cgtgacatga gggcaaacgg 180
 ggctgtcgga gtcacaaaga gtgtggagaa gagggacca ctggagcaag gtgacgaagg 240
 ctgctgcca gaagaaatga tctatctggc tggtagacaa ggctgctgcc aagaagaaat 300
 gatctatctg gctgggtgctg tgcttgcttg ttggttacct cgtggaagct taaaatatct 360
 cgtcctgttg acatccttgc 380

<210> 6070
 <211> 427
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-H5
 <400> 6070

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 catcatgcta ttgctctagg tttgcataca actacattga ttttagtaaa ggggtgcttta 120
 gatgcacgcy gttccaaatt aatgccggat aaaaaggatt tcgggtatag ttttccttgc 180
 gacggcccag ggcgcggcgg tacttgtgat atttctgctt gggacgcgtt ttatttggca 240
 gttttctgga tgtaaatac cattggatgg gttacttttt attggcattg gaaacacatt 300
 acattatggc agggcaacgt ttcacaattt aatgaatcct ccacttattt gatgggatgg 360
 ttaagagatt acctatgggt aaactcttca caacttatta atggatataa tccttttggg 420
 atgaata 427

<210> 6071
 <211> 428
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-H6
 <400> 6071

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 atgttcccc agttagaatt atagttgctg atggagaaga ggacgttact atcaaggtta 120

gcgatgaagg tggcggggata ccaagaagcg gcctcccgag aattttcacg tatctgtaca 180
gcactgcaaa gaatcctcct gagctagata gacctaatac tgaaggggta actatggctg 240
ggtatggttt cgggctcccg atcagccgac tctacgctcg gtattttggc ggcgacctgc 300
aatcatctc gatggaagga tacggtaccg atgcttacct ccacttgctg cggctgggag 360
attcggagga gcccttgctt tgacggcata tttttgtgga cctccagtac cactcttctc 420
ctgtaact 428

<210> 6072
<211> 248
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-H7

<400> 6072
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tagcaatctc tcttcttcac gatcgagaga tagcgcgcgt gcgtgtaatt aagtattata 120
gatgcatgta tgatgcatgc gtgtgtgtat ctatatatca tgtgatgggt tgtatatgag 180
ctagctatag ctagagtcgt gtaatagtat actacaaact aagctaatac aatatccaag 240
tttgctat 248

<210> 6073
<211> 353
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-013-Q1-E1-A3

<400> 6073
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ccccggttaa tggcaacttc cccggttcca atccaacctc ctggtggaac cccaaaaaca 120
acaacaagga aacaggcacc caaccggtcg atgtggtcgc gtcgtgcgac tcgccggcgt 180
tggtgccccg gtgctgacgc ttgtccgcgt ggggtgtgga cgggtgtccg tggtcacctg 240
cttcatctgc tgtgttttgt taggactggt gtacatatga ggacggatga ngcgggcgga 300

gggagcacca gggtaaataca actgtcacccg ccgtctacgg aaccggcgaa aaa 353

<210> 6074
<211> 137
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-A4

<400> 6074

gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaataa aaaataaaaaa aaaaaaaaaa aaaaaataaa aaaaaggggg gcccccccaa 120

aagtttcaaa cttttttt 137

<210> 6075
<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-A5

<400> 6075

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cacaaccggc cgcctcagct tctgctcctt ttcctttccc agcgcacacg ggaggcggcg 120

attcgcgcg gtgagggcgt ccgaggagac gatggcgacg gagaagctgg gcatcaaggt 180

ggagcgcaac ccgcccagat cccgcctctc cgagctcggc gtccgccagt ggcccaagt 240

ggggtgagc aagagcaagt tcccgtggac ctactccgcc aaggagacgt gctacctgct 300

gcaggggaag gtgaaggtgt accccgaagg ccacggggag gagttcgtgg agatcggcgc 360

gggagacctt gtcgtcttcc ccaa 384

<210> 6076
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-A6

<400> 6076

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gaaggcagtc gcggaacagga ggaagaggaa gaagaagcgg cagcgagcga ggatgccgtg 120
cctgaacgtg tcgaccaacg tgaacctgga ggggggtggac acctccgcca tcctcgccga 180
agcctccaag tccgtcgcca acatcatcgg caagcccagag gcctacgtga tggttgttct 240
caagggttcg gtgcctatgg catttgaggg taccaggag ccagcagctt acggtgagct 300
ggtttccatc ggaggcctga accctgatgt gaacaagaag cttagtgtg gcacgccttc 360
tatcctggag tcaaagctgt 380

<210> 6077

<211> 331

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-A7

<400> 6077

aaaaatgcta atgtacttgt tgtgaagtaa ttgatttgat gtaatcacac tcttggccac 60
tgtgggctga ctacctctaa tgtgctgaaa actaactgca tcctgtggct cagtatagt 120
ttcgtcaciaa tactgtgtac accacaactg aacatgttat catgtggtct ccgaacccaa 180
cgggtgtcagt cgatctcctg catcagctgg aaggattctg tgcacgtaac gctagtcctt 240
actagttcaa tggctagggg atgttgccat tcacaacctt gcagatggta cagttagctg 300
tcatacgacg ttcacatgaa ccatcatttg t 331

<210> 6078

<211> 369

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-A8

<400> 6078

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cgacgctgat ctgcttcttg ggctcgggtg tgaccggcgg ggtggcgctg gtggcgagc 120
gccacgacat gagcgcttg gtcattggct tcgacacccg cctcttcacc gccgtctact 180
ccgggatcgt gtgctccggc gtggccttct acgtgcaggg gatcgtgacg caggcgcgcg 240
ggccggtggt cgtgacggcg ttccagcccc tgtgcatgat catcaccacg gtccctcggct 300

ccaccatact caaagaggag accaccttgg gaagcgtgat cggcgcgggcg atcatagtgg 360
tgggggtctt 369

<210> 6079
<211> 393
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-B12

<400> 6079

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ggagatcatg gagctctgcg tctctaccac tgcctccgtc cgcgccaccg ccgcgcccat 120
atccttcgcc ccgccccggc gaggcgcgtc tgcttcacc gccctcccgc tccaccgccg 180
aatcccaact cgaggctggg gttgcgccag cgcggccgtg cctgaccggg cgccctccga 240
agagctcgca tccgcctcct acaccgtcgt cgtcgcggac aagcccgatt cgctgccga 300
tgacaaggtc gacgaggtta gcgccgcgcc tagtggctcc gcggaggcgc ccgtatcaga 360
accggtgtca tcagaggcgt ccccgteccc gtc 393

<210> 6080
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-B2

<400> 6080

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cgcaaagaag gttggaggca aaactggagg gcttgggtgt cgtaaactca caacaaagcc 120
aatgaaagc ctgtatgagc agaaaccaga agagccaaaa cctgctatac ctgccttgac 180
tgctccaact gcaaaagggt gtccatcctt gcattcacgt tttgaatatg tggataacga 240
acaatcatct gtttcaagaa ccgggggatc tggatctcgt gtaaccggtc atgtagcacc 300
accaaaatca tctgacttct tccaagagta tgggatgggt aatggattcc aaaagaaatc 360
aagcaacgcc tcaaaagctc 380

<210> 6081

<211> 356
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-B5

 <400> 6081

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 aagatgccga agaacaaggg taagggaggc aagaaccgga agcgaggaaa gaacgaggct 120
 gacgacgaca agcgcgagct cgtcttcaag gaagacgggc aggagtacgc gcaggtgacc 180
 cggatgctcg gcaacggggc gtgcgaggcc atctgcgtcg atggcacgcg ccgcctctgc 240
 catatccggg gtaagatgca caagaaggtc tggatcgcgg ctggggacat cgtcctcgtc 300
 ggctccgcg actaccagga cgacaaggcc gacgttatcc tcaagtacat gaacga 356

<210> 6082
 <211> 380
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-B6

 <400> 6082

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 aggagcaaag cagctcgcag tccgggtctc cccacggccc gctccacttc tccacctcag 120
 gcatcgcagt ctgctcggcg gccaccgtca gctgcgagga ggaagacgga cgggtccgaga 180
 gctatggctg gaaatgatgg agaggctgct gctgctgctg ctgctgagag gggagctgca 240
 gcctcaggaa cgggaatcat caggagggaa actgagagta gtgtagctgt ctgtacacat 300
 acatagttac attacattac atacaggag tgaggagat cgggccttga gcgctcgaga 360
 ccaaactgat gcttcgggtt 380

<210> 6083
 <211> 372
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-B7

 <400> 6083

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 caccatgcgc aagaccgtgg gcaagcccaa ggtggcggcg tccggcagcc cctggtacgg 180
 ccccgaccgc gtcaagtacc tcggccctt ctccggcgag ccccgagct acctcaccgg 240
 cgagttcccc ggcgactacg gctgggacac cgccgggctg tccgcccacc ccgagacctt 300
 cgccaagaac cgcgagctgg aggtgatcca ctcccgtgg gccatgctcg gcgcgctcgg 360
 ctgcgtcttc cc 372

<210> 6084
 <211> 375
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-013-Q1-E1-B8

<400> 6084
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 tcttttcctc tccacaggcg actcccaacg caacagcagc tcgtcgagcg agtcgtcgcc 120
 ggccggccgg tatatacgca agaaagccaa gaaaaaact tctgcctctt cctccatata 180
 caagaaacaa aggtagctag ctagccgcga ctcgttggct agacgattca agcagcagcg 240
 caagatggtg gcgccggtgg tgattgcgtc ggccgggctg ggcagctggg ccggcggtggc 300
 gatggccaac cggtcnctcg ggaacgggct ctccggggcc tccaggtggg acgcgcgcnc 360
 gcgctgcgcc acgtg 375

<210> 6085
 <211> 394
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-013-Q1-E1-B9

<400> 6085
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gggctaacac cggcgaagcc gggggcggtc gaggtgcagc gccgacgggt gggcagcggt 180
 tggacgagcc gtcggatctc catctacgcc tcccagagtct acttcctcct catcatgctc 240
 cagatcccgcc tcttcagggc cccttgatana gctggcacat gcacaactcc tattcaagta 300
 acatcatctc agttgggtctc aaatgatata ttcccagcag ctgttggtgaa ggccatgctc 360
 taccctggag ctaccgtgag cagcctaact aaaa 394

<210> 6086
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-G5

<400> 6086

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 ggaaagcgctc gctcgcccggt ttcttgagaga agcgaaagga aaggtatgga ctgtgccttg 120
 gtatactttc tatgggtgat atgctctgct caagcttggt gtcgtcgaca tctgaccgat 180
 ccctgcgtca ggacactagt cttcatcctc cttgtttctc tccgcagagt ggctagcgctc 240
 gagccatacc tgacgtccaa ctccaagagc ccgctagaga gcagtgcgc cgctggcagc 300
 gctagcgctc caacgaaatc gtcattccaca gacgtcgccc cggcgagcag ccaaaacggc 360
 ggcggcgcaa agcttgtgctg ccatggcgga ta 392

<210> 6087
 <211> 208
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-G6

<400> 6087

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 aaggtctatg ctggagcgag agagaagaga ggaagagctg tctgaaacaa agaaaactat 120
 agacgcgctt aatggggcac gcgagaaatt tccagaagca agaaaactgg cttcattcaa 180
 accgaaattc atttaccac caattgca 208

<210> 6088

<211> 221
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-G7

 <400> 6088

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 cttgccatga agtatttcgt agtactcttc tgcgctagct tcgtttactt tcgagtaaag 120
 aataaggtgt cccttggttc aataatgatt ctgcatgtaa ttacattcca tggcacggcc 180
 attccggcaa caggctcagt aaaaatatct tttttagtgc c 221

<210> 6089
 <211> 414
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-G9

 <400> 6089

 aaagcattc gacgtcgac gggcgctgca cacagacaca ccaagcgctg gcaccaatgg 60
 cttactacca ggaggtggac tactgctcgg aggaggtgag gtcggtggcc cgggccggct 120
 tcggccgcca cggaggcggc gtccagcagc acgtcgtcaa ggagaagtgc gaggaggtcg 180
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<210> 6090
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 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-H1

 <400> 6090

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<210> 6091
 <211> 422
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-H10

 <400> 6091

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 tgtgcttcat cgttcgtacg ggcaacacat tccttggtc tttgctgtgg gttgactatg 240
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 catgttccgc tgtcactgcc tcaactaggca cgttcacaat accatcgatg gcttgacctg 360
 ctctatagaa tgctgatcta ctcttcaactg gaagccccct tatatatagg acaaaaaatcc 420
 ca 422

<210> 6092
 <211> 381
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-H12

 <400> 6092

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 aactcctttg tttaaataata ctgggtaatt cttgtagtta tgttgttttg taggtacctg 120
 tagcatattg gcgaccatgt catcccgtaa atgtcagcaa agtaggtgag ccgtcaaaac 180
 acgctcttaa acaaggcagc tactagttac tccgatttat tagttatggt cggtttgtat 240
 taatgtaagg ctcttaaata tgaaagacat ggtacggtaa caccgattat taggggtatgt 300
 acaatcctga tattgttgta tgatacttta agtataagac acaactaaaa cacaatataa 360
 tacagtaaca aaataaatgc t 381

<210> 6093
 <211> 142
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-H2

<400> 6093

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aaaggagaag aggcacaaac gtcgaactgt ggtaaagag gagagacgta aatcaggccc 120

acctcgtctg ggcagacaca aa 142

<210> 6094

<211> 118

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-H3

<400> 6094

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aataaaaaaa aggcaaaaca attaaattaa aaaataaaaa agaggggaat gaatcaag 118

<210> 6095

<211> 252

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-H4

<400> 6095

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tacctcttcc tgtatgcagc attctatttc ttcacgaaac tgcagatcac gaaggcggtc 120

tccggcgtgc tctacttcgg ctacatgctc atcgcggtt atgccttctt tgtactcacc 180

ggcaccattg gcttttatgc ctgcttctgg ttcaccaagc ttatatactc ttcgggtgaag 240

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<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-H5

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tgagcccgcc gggggccgac gccgtgggtg acggtgccgg tgccgggtgcc ggtgccgctg 180
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cgaggcggaa ctgcgtgcac aggttccctc agaagagaaa ggacaggata accgcaaagg 300
cgccgtacca agtcaacagt tccgtcggcg ctgaggcgtc caaggcggag aaacctggc 360
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<210> 6097

<211> 286

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-H6

<400> 6097

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ggagatcgat gacatggatt gtgaaccgca gctgaaggcg tacacttttc cgttgccccg 180
gggccaactc ctccagatca cgctcgacga cctccgcctc ggggaggaga ttgcgcgctg 240
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<210> 6098

<211> 466

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-H8

<400> 6098

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cctccgtgac gggcgagcct tcctccaccg cgcgcttgct ctctcgtcgc tgctccttct 180
cgctccggc gaaatcttct tcgaggaacg gttcgatgat ggggtgggata gccgctgggt 240

gaaatctgat tggaagaaga gccaaaggaca agctggaacc ttccgacaca cagcgggaac 300
ctactctgga gacctgacg ataaaggtat acaaacaact ggggatgcca aacattttgc 360
tatatcagca aaattccac aatttagtaa caaggatcgg acattgggta tccagtactc 420
tctaaagatg aacaagatat tgaatgccgt ggtgcttaca tcaaac 466

<210> 6099

<211> 276

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-A1

<400> 6099

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ggaaggctgc agggagtga ggtgtcgatt gcagggagga acctttacat gaggttcagc 120
tgcagcacag gggatgccat ggggatgaac atggtctcca aagggtgtaca gaacgtgctg 180
gactacctcc aggctgactt ccctgatatg gatgtcatca gcatatcagg taacttctgt 240
tctgacaaga agtcagctgc tgtgaactgg atcgat 276

<210> 6100

<211> 396

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-013-Q1-E1-A10

<400> 6100

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ccttgcccc ggggtgttcc ggtgaatggt tttggatcca agcccgaagg cctaatacaa 120
aatgggttct taagcattcc gaattggaat gggcctcccc cgaaaagggtg gaaaaaaagc 180
aatgagatcg aacacagtaa ttacataagg ttataactgg cgcatttcct gacaacgtgg 240
gtaaaaaact tattggcctt gttacaagta gagatgaaat cgctgattta ctaaagcttg 300
atgatgtcat tgatcttgct attccaagag gcagcaataa gctggtttcg canatcanag 360
catcaactaa gatacctgtc ctcgggtcatg cggatg 396

<210> 6101
 <211> 356
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-013-Q1-E1-A11

 <400> 6101

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 cggcatgcag taccatggc cgccctcgc tgctcatggt gttgggcaat aatctacca 120
 tacagtatta ttcttggggg cttaccggga aatttgagaa tcatcatcaa tgtattataa 180
 tcgtctcatt aggtangatg actggatgat gacgaatagt caactagtct tcgtctcctg 240
 tctttttttt ttattctgtg cgggatactg aatgtggagt ataattatgt ttgcaacaga 300
 ttaaaccaca tatgaatatc aattgcaagt tgcactgcaa aaaacaaaac acaaac 356

<210> 6102
 <211> 65
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-A12

 <400> 6102

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 ttggt 65

<210> 6103
 <211> 416
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-012-Q1-E1-E2

 <400> 6103

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 caaccccggc aatggcaggt tcatcatcgg cgaggaagag gaataggctg ctggcctcgg 180
 acatgagtcg tgtgcgttta cttttacctg tgactgtgag tgatcgatcg attgctgtgt 240

atcaattact cgtgatgaga cctcgaaggt anggtgtcgc gttgggcgga tggcgagct 300
 gggcgtggcc ttctccatca tcggcgagat catcacggng aagggcgcg c tggcgagct 360
 caacatcgag acgggggtgc ccatcaacga gatagagccg ctcgatcatct tcaacg 416

<210> 6104
 <211> 380
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-012-Q1-E1-E3
 <400> 6104

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 gatcgatcca gtgcgtcctg catggaaact gccgcgctcg ccgcgcgagg tgccggggcg 120
 cgcacatcgg tggccgtgga cgagggcgag gagagcctgc acgcgctcaa ctggtgcctc 180
 gccaacgtcg tctccccggc aggaggcgac acgctggtgc tcgtccacgc ccgcgcgccg 240
 cgcccggtct acgcgcgcat ggacagcgca gggatcatga tgaccgcgga cgtgcggggc 300
 aaccgtcgag aggcacgcca acgcgctctc ggcggggggc gtcgacaagg ccaagcgct 360
 ctgcgcggac caccgcgacg 380

<210> 6105
 <211> 377
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-012-Q1-E1-E5
 <400> 6105

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 ggtatacagg gaggtcttga tcggcaaat caagagcact taaaagaaa tcaccgggag 120
 cagcaactga tcgaacatca tttaacagat gggttcttaa gcatatgga gaattgcac 180
 cgtaagcact gaagctgcca tgcaagtga agtgcttctg gtcccgacct cagtcagaga 240
 aaaaaaactc tgcagttgag caagccgttt tactttgttt cagtgtataa ttatgacgt 300
 attcccagtt ctttttcaaa aaaaaaaaaa aaaaaaaaaa aaacaaaaaa aataaaaaaa 360
 aggggggaca cactaaa 377

<210> 6106
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-E6

<400> 6106

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ccaaagaaaa agctacggcg gacagagcta caaatacaat ggggttacct cactgcctgc 180
acagcggaac ctaactccgc cccccacact ctatccacag cagccaatgt cctcttcac 240
agaaaactac agataccaca gattttcctc ttcgtcaata cctgattcaa gtggtgggtc 300
aaaaagccga gcgaacctta atatatgatg ggatatgtaa gtccttatcc attatcacct 360
ggagtgtggg aaaaaaacat gacaactggg gttttttggg tctcacggtt tttgatcctt 420
ttt 423

<210> 6107
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-E7

<400> 6107

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ttaaggggtgc aaaagttgtc tttgacagaa ctactggccg ttcgaaaggc tatggttttg 180
taaagtttgc agattcggat gaacagacac gggcaatgac tgaaatgaat ggacaatact 240
gttctagcag ggccatgcgc cttggaccag catcgagcag gaagaatact ggtggaccac 300
aaccatcgag tgctatttac cagaacaccc aaggaactga ttctgatagc gatccgaaca 360
atactactgt atttgttggc ggccttgacc cgagtgtgac tgacgagctt ctgaagcaaa 420
ctttcagtcc at 432

<210> 6108
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-E9

<400> 6108

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cgggcctgct cttcctctac atcgccggct ggatcgggtg ggtcggcagg agctacctca   180
tcgccatcag cggcgagaag aagcccgcc aagaggagat catcatcgac gtcgagctcg   240
ccaccgcct cctccccagg gggttcatct ggcccgtcgc cgcctaccgc gagctcatca   300
acggggacct cgtcgtcgac gacaaggaca tcggctacta ctagctgcgc ttgttcacct   360
gcttgcaactg tgcataatata ttgctgctgc cgagctgggc gcttgatag tacgtgggga   420
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<210> 6109
 <211> 405
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-012-Q1-E1-F1

<400> 6109

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aatggcgggc acggtgacgg tcccgggggc gtcgaccccc tccacgccgc tgcctcaagga   180
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gtgcccgaag gcttcgacta cgagctctac aaccgcaacg acatcaaccg catcctcggg   360
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<210> 6110
 <211> 416
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-F12

<400> 6110

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tcctgcccgc ccgcccgtgc ccgtcgacgc gtcgttcttg ccggccgcgc cccacctccg 180
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tcatcaaggg ctacaagcgc acctttaatc tcgcttgcac tgaccacaga ggcacaccgg 360
agcatccggc gaggacctgc acgcttgaaa ccgacgacga ggccatatgc cgggga 416

<210> 6111

<211> 274

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-F2

<400> 6111

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actatgcaga aaaatttgca aaatcaggct ttactggagg acttaactac tacagggtgca 120
tagacaggag ttgggagctt tctgcggcat ggactggagc tccgataaaa gttccgtcga 180
aattcattgt tggggacctt gacattacat acaacgcccc ggggggtaccg gactacattc 240
acaaggggtgg cttcaaggca agcgtgccaa atct 274

<210> 6112

<211> 394

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-012-Q1-E1-F4

<400> 6112

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aagccgtgaa ggagacaggc accttccaga aagttcctgc cttgaacgaa aggatactgt 180
catccatgtc caggaggtct gttgctgcac acccttggca tgatctggag ataggtcctg 240
gtgctccaac catattcaac tgcgtcattg agataccaag gggcagcaag ggtataatat 300
gaacttggag gggaagactg gactgattca agtggaccgt gtgctgtatt caacagttgt 360
ttaccctcac aacaatggat tcattcctcg cacg 394

<210> 6113
<211> 255
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-F5

<400> 6113

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tctaagggtcc tcctcacggt atccaagttg acagggataa gttgaacaag tacggtcgtc 180
ctttactatg atatactact aaaccataaa taggattatc cgcatacacac ttactgtaca 240
gcgtattatc attgt 255

<210> 6114
<211> 231
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-F6

<400> 6114

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agagagcgcg gcggcacggc aggtcacgtt ctccaagcgc cgccgcggcc tctacaagaa 180
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<210> 6115
<211> 315
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-F7

<400> 6115

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atgagctgtg cctaagagac cttgccatct aaaatttgaa taccatctca aatttgacc 180
catgtagttc tgagtatgcc gggtatcttt ttgtggctcc aaatctcact ctacgccttc 240
tttccttcgg ctgttagcgt ttagagtgc aaggacactt cctgagagga ggaataaagt 300
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<210> 6116

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-F9

<400> 6116

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gtgatgggcg ccggcgccca ggaggatgag gaggagataa ccacgggtggc cgagggagga 180
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tgcccca 427

<210> 6117

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-G12

<400> 6117

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ttcaatagtg tgggtactggt ggcattgtgg ccagccgaga tctgacagtt cttagaaaaa 360
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<210> 6118

<211> 150

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-E12

<400> 6118

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<210> 6119

<211> 398

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-C7

<400> 6119

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catcatcgat tttttaaact tatcaagaac atatgaattc aaaatggggc agttctcagt 180
gtgcagaagg cgagctcgtc ctcttcctta atgaggttct taagagtgtt tcctcagctg 240
tattggttac cttactact ttggattttg gaaacagtcc gagaccctta ttagttaaca 300
atatcatagt tggtgcaaag atactctact ttttttcctc atctcttctt taacattcat 360
atctcccagt tggtgcaagg ggaaaataac cccagtaa 398

<210> 6120
 <211> 236
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-C8

 <400> 6120

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 attgacttac tacaccccg agtacgaaac caaggatact gatatcttgg cagcattccg 180
 agtaactcct cagctcgggg ttccgcctga agaaacagga gctgcagtag ctgcgg 236

<210> 6121
 <211> 434
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-C9

 <400> 6121

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 gggaagcctg cgaagatcgg agagtgggtt ggatacgccg gcgatcgtcg ggatctgagg 120
 gctactccgg accggctgat cgaggtgaag gtcacggcgg acaacagcag ctgcatccgc 180
 tccatctcct tcatctacat cggagccgat ggcaaaccgt acgaggaggg gccatggggt 240
 ttccggccatg ctggcacgga gtacaagatt gatctgtgca ggttcgacga gagcttgacg 300
 gagatctccg ggaccacggg cccagcctac aacattgaca atctgggtcaa gtctctcaaa 360
 ttcgtcacca acaaacgcgc ttacggaccg tacggcaggg acgagggcac cccgttccgt 420
 gtcaaggtga tgaa 434

<210> 6122
 <211> 260
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-D1

 <400> 6122

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catcgcatcc gtacgacacg cgcaggatca gtacagaccg aggcgcccgc gggttcagcat 120
tccctccatg caccgtacaa gagacaattt gctggagtct tcgacacgat caggggtccg 180
atggcccagc aatggatgat cctgccgttc ctcgggcccgc tagaacctgc ggtggctgct 240
ctggtcacgc tcccgggtgcc 260

<210> 6123
<211> 430
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-012-Q1-E1-D10
<400> 6123

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tttgacgcca aattgcggag ggaaagcact gatgttgagg acttgtttct tgctcatatc 120
tccggaatgg acaccctggc ccgtggcctc cgcaacgccg ccaagctgat cgaggatggg 180
tccctagatg ctctcgctcg caagcggtag cggagctttg atagtgagat ggggtgccttg 240
atcgaggctg ggaaaggaga ctttgaggcg ctggagaaga aggtccttga gtgggggtgag 300
cccactgttc cgtcgggcaa gcaggaactg gcgagattc tgttccactc tgctctatag 360
atggcgccat gtccgtagcg gtagctcctg gaataagcaa gcactgagcc tgcgcccctc 420
ctaacgcgcg 430

<210> 6124
<211> 424
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-012-Q1-E1-D11
<400> 6124

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cgccgtccac acccttgac cccgactccc ctcgtccttc gtggccacga tgggggcgtc 180
catggcatcg ccttaggggc gatcgatctg ggagaaagt ctggagcacg tggcgctgta 240
ccaccagcag caacggaggc agaagctacg caagagcctc acctacaccg gcagtgaagt 300

ctcgttcgct gtccggggtc gtggggacga cccgcctcc acgtccgttg gggcacagaa 360
cgaggacatg cctcttgagc acgtctttaa aatcattaga tccgatggca aaagtgtgtg 420
ttaa 424

<210> 6125
<211> 401
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-012-Q1-E1-D12
<400> 6125

gaactcgtca gatatgtag catgtggaga ggaccttggc cttatccctg cttgtgttca 60
ccctgttatg caagaactgg ggttgattgg attgcgtatc caaagaatgc ctagtgagcc 120
aaacttggaa tttggtattc cttctcagta tagctatatg acggtttgtg ctccctcatg 180
tcatgactgc tctacattac gtgcttggtg ggaagaagat gaaggaagaa gaagtcgttt 240
ctacaagact gtagttggca gtgatgagga ggccccatct cgttgcaccc cggaagtagt 300
gcacttcatt gttcagcagc attttgacgc tccatcaatg tgggcaatct ttccacttca 360
ggacctcctt gcactgaaag acaagtacna cacaagacca g 401

<210> 6126
<211> 429
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-012-Q1-E1-D2
<400> 6126

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gagcgtccgt gtagctgccg tcgtcgcgac cgaggccgcg cagatcgact acagctcaag 120
cgtctcgtac gtgttccctg gccttgatca acaaacaacc agtcggtgta gagctaagtt 180
ctggatggta tggtagaat ttgggtcggg gacactgaca cgcattgttg tgacgctgca 240
gggtgttccc gatggaggcc tgcgacctgc ttggtggcga cgcgtgcaac gggcccatgt 300
gcccggaggg caagcccgcc tcggggggcg cggcggcgag caggagtgtg gtcgggggtg 360

acagggacta cctgtcctac gacgagccaa agacgtaagc agcagctagc aactaccata 420
ggataaccc 429

<210> 6127
<211> 431
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-012-Q1-E1-D3

<400> 6127

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aaagaaagag agcgagaaga gcagtcgcca tgtctggcat catccacaag atcgaggaga 120
agctccacat ggggggagac cacaagaagg aggatgagca ccacaagaag gccgaggagc 180
accacaagaa ggaggagggg gagcaccaca agaaggacgg cggggagcat aaggaaggca 240
tcgtggagaa gatcaaggac aagatcacgg gcgagcacgg cgacaagtcc ggcgaccaca 300
aggaaaagaa ggacaggaaa aagaagaagg agaagaagaa gcacggcgag ggccacgacc 360
acgacggcgg ccacagtagc agcagcagcg acagcgactg agatctggtg tcgcagcaaa 420
ngtgcaacac a 431

<210> 6128
<211> 440
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-D5

<400> 6128

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tttagttaga ggctacgggc ggtcggggcg ggcggcggcg gcggccatga gcagcgggag 120
cgagagcact accgccagca ggtgggctga gctggccacg ctgcgcgcgc tggcgcgaga 180
cgccgcggag cagcttcggc tgccgcgggc cggcacgtcg gcgtcggcgt cgtcgtcgtc 240
gccgtggcgc gggcgcgagg accacctcca cggccacggc aagacggcca aggtgatgca 300
cctgctgctc tggggaccca agtgaagcgg cggcgagagg ccaccgtacc gccgggctct 360
cccgccggcg ttgctcgttt tgctctgcct gcaatccgcc ccgcacggac tgtactgtac 420

ctatacacct atatactacg

440

<210> 6129

<211> 265

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-D6

<400> 6129

gccctacaga ggaaaccaga acctcccccac aaaggcaaac ggcgaggctcg agactgaacc 60
ttccggccca ctgctgtgc tcaagggtt caagaacttg cccacgggga tgccgtccgt 120
gctcctcgta actggactca cctggctctc cttgggtccc gttcatctc tacgacaccg 180
actgaatggc ccttaaattc aacaacggca accccaaggt taaaacccc caattcccg 240
ctttcaacaagggttcaaa tttgg 265

<210> 6130

<211> 365

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-D7

<400> 6130

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tcccctgtgc tagagaacat gtattggcag gctttcactt cctatcacga accattgttg 120
agtaggtcgg actgataact agagtttctt cttcagggct ccgttggtatt gttttgctct 180
tatcttatct tgggtggtgt ggcaaagaat ttgttggtgt aacggttgat gcagctagag 240
ttggcagcga cattttctgt aagagcacac ggcagggacg ttaattaaat atattcctct 300
gtagcgggtg atggaaaaaa aacaagatac aggacagaat aacataagcg gcggcagcca 360
caaaa 365

<210> 6131

<211> 447

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-012-Q1-E1-D8

<400> 6131

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cagaggtgcg acgtacgacg acgacgacgc aggcgccaca catggcatcc cagctctccg 120
ccgccgtgcc ccggttccac ggcctccggg gctacgccgc gccaggtcc gcggtggcag 180
cgctgccgtc cgtgaggggtg ggcaggaaga ggtcgtcgtc gcagggcatc cgctgcgact 240
acatcgggtc cgccaccaac ctgatcatgg tgacgacgac gacgctgatg ctgttcgcgg 300
ggcgggttcgg gctggcgccg tccgcgaacc gcaaggcgac ggccgggctg aagctggagg 360
cgcgcgactc cggcctgcag acgggtgacc ccgccgggtt cnacctcgcc gacacgctgg 420
cctgccgcgc cgtcggccac atcctcg 447

<210> 6132

<211> 66

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-D9

<400> 6132

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ttcacg 66

<210> 6133

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-E10

<400> 6133

gccaaacaca cgcaagaaa aggagataga gtacaggtta cagacaggca gagagcaaag 60
atgtgtggtg gtgcgacctt cgccgagctc atcccgacca cgccggcgcg ccgcggcggc 120
gcggcgtggc ccgccggcaa gtgcaagcgg cggaaggcga acgacttcga ggccgcgttc 180
cgggagttcg acgaggactc cgaggaggag gaggaggacg acgagggggg ggtggagagc 240
aagcccgctt tcgtcgtcgt cgcctcgtcc gcggcgacgc agcccagggc gcgccaggag 300

cagcggagcc ggcgcgggc gcccgaccag cagcagtaca ggggcgtccg gcgccgccc 360
tggggcaagt gggccgccga gatccgcgac cccg 394

<210> 6134
<211> 383
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-C5

<400> 6134

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ggtgaaatct tgggtgaccg ttatcctcaa atggccaaca cctggaagga ctctgagacc 120
ccgccattgt cttcttgga atctgagtag ccaatctggt gtctcttcaa ttctgccacc 180
gtcacattgg tgtatctcca aattgtcgga ctgcagaaga tactcaggtg cactttgcaa 240
aagcgtccat atgatgtgct tgccttttgc aagccatgat gtttgggtact tgggtgtgtat 300
tgcatgcctc aatttgatc aagagtattt acccatgagt atagcttgaa gggttaaaac 360
actggttcga cgaataacca tat 383

<210> 6135
<211> 425
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-012-Q1-E1-E11

<400> 6135

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tggagtacct tgaggagcgc cgcctcaagg atctgatcaa gaagcactcc gagttcatca 180
gctaccaat ctctctctgg attgagaaga ccaactgagaa ggagatctct gatgatgaag 240
atgaggagga taagaaggat gaggagggtg aggttgagga tggtgatgat gaaaaggaag 300
aaaaggaaaa gaagaagaag aagatcaagg aggtttctca tgagtggcaa ttggtaaaca 360
agcagaagcc aatctggatg angaagcctg aagagattac canagaagag tatgctgctt 420
tctac 425

<210> 6136
 <211> 202
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-A8

 <400> 6136

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 tgccgtgtcca ttgagatctc tttcacgccc ctttctgtcca tcgcacaact gagccgcagg 120
 tactactatc cacttggcag gtcagtatct cctgcgagga caaccattga ttatttgaag 180
 gtggagggtg tacactcatc at 202

<210> 6137
 <211> 429
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-A9

 <400> 6137

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 ctttgtgggg tatacgtaca aaaacttcga tgcggtgaaa gcaataaaaa tttcagatct 120
 gcaaaggaat tcatctctaa caaggccttc cattgggttca atattcggtc caccaggcat 180
 ggattctccc atggaaccaa acgggagggg cacacatatg cacacagttt catctgggtga 240
 tccaatgatt ccctaacctg cagtgtgtgt tgtcctcggc aaatttctga actaaatcag 300
 catgcaaacg cctggatgat gtgggtccag ctggataacc tgctcatctt tagccagggt 360
 tctgctttct caatcgtggg caagcgggtt gtagaaatcc accagagttt ctaattgtaa 420
 aatagtatt 429

<210> 6138
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-B1

 <400> 6138

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gcgcttgcca tgtgtccagc agaaccatat gtcctgtcag gaggaagga caaatattgtt 120
gtcttggtga gcatccaaga ccacatatct gcccttgggg attcctcgtc ttctcccgga 180
gcatctggca gcaagcagtc tggcaaaatt gcaaataaaa aggagagtcc taaagttgat 240
cctagaggta tattccatgg ccatgacagt actgttgaag atgttcagtt ctgcccttcc 300
agtgcgcagg agttttgtac tgtgggtgat gatgcttgtc ttattctgtg ggatgctcga 360
actggcactg acccagctgt taaaggttga gacagctcac agtggagatg ttcattgtgt 420
ggattgggat ccccttgatg 440

<210> 6139
<211> 331
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-012-Q1-E1-B10
<400> 6139

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aaggccatgg ccaacgcacc ggcggaatc caatggagc aactggggag gaggcgcagc 120
agctgaccat cttctacagc ggacaagtgg tegtcttcca caggttcccc tccgccaatg 180
tcaaggatct gctgcacatc ttcagccgc cgggggctca cgctgtggtg tacagtgcgc 240
gtgccggtgc ccgtgctgct gtctctacgc ataagttgcc tatgccctct cagcacagtc 300
tctctgccga tctgccaatc gctatgctga a 331

<210> 6140
<211> 421
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-012-Q1-E1-B11
<400> 6140

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gctactcaga gaggaagcag tgtgggtgat gctggaggtg cggctgatag agtgcttaat 120
cagctactga cagaaatgga tggcatgaat gccaaagaaa ctgtgtttat tattggagct 180

acaaacaggc ctgacatcat tgaccctgct ctgctgaggc cagggcgtct tgaccagctg 240
 atctacattc cactgcctga tgagcagtct aggctccaga tcttcaaggc ctgccttagg 300
 aagtcccctg tggcgaagga tgtggacttg aatgctcttg ctaagtacac tcaagggttc 360
 agtggagcag atatcacaga aatttgccag cgtgcgtgca aatatgcaat cagagagaac 420
 a 421

<210> 6141
 <211> 409
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-012-Q1-E1-B12
 <400> 6141

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 ttcgtcgtca gggccagctc cagccctcca gccaaagcaag gtgccgacag gcagctgtgg 180
 ttcgcgtcca agcagtcctt ctctacctc gatggcacgc tgcccggcga ctatggcttc 240
 gaccgcgtgg gcctctcgga cccggagggc accgggggct tcatcgagcc caagtggctg 300
 gcctatggcg aggtgatcaa cggccgctac gccatgctgg gcgcggtggg cgccatcgcc 360
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<210> 6142
 <211> 376
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-012-Q1-E1-B4
 <400> 6142

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 tgaatcaggc gagcggcctt agaccgccgc tgatgatgcc aggcctcagt acccagtcca 120
 gcatgccggc aatgtatgca aataacatgc aggggcatcc ccagatggct ctgctgcaac 180
 agcggcaaca gatgctctcg ttcggtcctc gtttgctctc ctcggccatc aaccccggt 240

catcctcgtc ggcacccaac atgatgttca accatggcat gcccaactcg gcagtccta 300
atcatcacc tttgctgaga taccctcagg ggaacattca natgtaggtt agtgagatga 360
gttttttcat tttttg 376

<210> 6143
<211> 64
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-012-Q1-E1-B6
<400> 6143

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gttg 64

<210> 6144
<211> 417
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-012-Q1-E1-B8
<400> 6144

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cctoctgttg tttggtgcca tcgagttcct caagtggacg cagctcctat cgacatggag 120
aggagtggca ttcactgccg cagggatggc gctggtgaca gggctcatgc acgtcttcat 180
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tgactcgatt catattaatg tatacagcac caaattccag acagaaacag gatgctctgc 360
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<210> 6145
<211> 419
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-012-Q1-E1-B9
<400> 6145

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 ttgggcccgc cgtcagcagc ttcccggcct ccgtcgtgct cagcagcgag taatttatgt 120
 cggagcagtt actgagacgc cctcctttgc gtcgtgctcg ccagatcaag cctcgcgtcg 180
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 tgacgccgag ctcttcaac actgccccac tccgttgctg ttattccgtc gcctcacttc 300
 gatgtcagtt cttcatgac atctcctact tgtgttcgcg ccgacaaaag gatcctaaga 360
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<210> 6146

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-C10

<400> 6146

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 cggccggggc caaggcaggc ggcccagga agaagtcggt gacgcggtcc gtcaaggccg 180
 ggctgcagtt ccccgtcggc cggatcgggc gctacctcaa gaagggccgg tacgcgcagc 240
 gcgtgggcac tggcgcccc gtctacctcg ccgcgcctc ggagtacctc gccgccgagg 300
 ttctggagtt ggcaggaac gcggcgaaag acaacaagaa gacgcgcata atccccgcgc 360
 acgtgctcct ggcgatccgc aacgacgagg agctcgggaa gctgctggcc ggcg 414

<210> 6147

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-A5

<400> 6147

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 gggcctcgct cgccgctggg cgytggagct ccccgacgcc tctcctcct cccccgcgt 180

ccccgacccg cccggcttca ccagatccgc gcctgacgcg gacgacgccg ctggagcgcg 240
ccagcgcaag gactccgagg ctgcatggaa ggcgcagaag gcttgggaag ttgcgcaggc 300
tccgttcaag aacctgatga tgatgggatt tatgatgtgg atggcaggga gcactgtcca 360
cctcttcagc atcggaatta ccttctctgc tctgtggcaa cccctcaacg ctctccga 418

<210> 6148

<211> 128

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-C3

<400> 6148

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caataatgga ttcttgctgg atcacacatt tatacttaga ataatcgaat gcttgcttcc 120
ttggttac 128

<210> 6149

<211> 351

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-C4

<400> 6149

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tatggtactc gacaagaatc atcataccac tgtaaactga ctagttgcat tccattgtac 180
ttgctttcaa atagattcat gcattgatat cctttctttg ggtactatgt tattacactc 240
aaataccatt gtctgtgatc tttgggtgcat cttggcattt taatttgatt caatccatgt 300
ctctaggttg tttattaatc ccttacaac tctctcctat ctgtggacta a 351

<210> 6150

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-G7

<400> 6150

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gctaccgcta tgctactgga cgtggaatgc ctgatcctgg catgcataat gttgggtgctg 180

tgatgccatc tccatatgag atgggagggg tggcaatgag agatgctggt gtctcacaac 240

ctgttccaat tggggcacta gccactgcgc ttgctaacgc ctcaccagat tagcaaagac 300

tgatgcttgg tgagaacctg tatectcttg ttgaacagct ggagcgtgag caggctgcca 360

aggtcactgg catgcttttg gagatgggac agacggaggt ctctcactgc tggagtcgcc 420

agatgctctc aagg 434

<210> 6151

<211> 346

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-H10

<400> 6151

taaaaaaaaa aaaaaaaaaa aatcaataaa aaaaaaagac aaaaaaataa gttcatcccc 60

agtaaattgg tcacctgaaa tgtaaggggg attactctaa agactgaact ctaaattaca 120

ttggctcgggt cgccctcattc gtctgtcaca ttgtcatcat cttcgggtgtc gggatgtctg 180

ttatccaggt tgagaatagg gaatccgctg ccgtgagtaa actatatgct gattctggaa 240

aataccgctt acatcagctg gcgaatgcac aatacgatct tcaacgggat cagtttccac 300

ttattcgcca cctgggttga gggcgtgaat ggcagcttta tgggcc 346

<210> 6152

<211> 431

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-011-Q1-E1-H11

<400> 6152

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acctcaacaa aactcccggg acaatcaagg ccaaaacggg gcattaactt ggtcccttgc 120

cggccaatcc ccaatgggtt ttgactaacc aaaatgtctt tgctttcgac tacacaactc 180
 aagttctggt tttcatcatg ctgtcgtgcc tgatttcagt ctcggtgaac ttcagcactt 240
 ttctcgtgat cggaagacg tctcctgtaa cctacaaagt acttggccat ctgaaaacat 300
 gcttggtcct cacctttggc tatgtcctgc ttcacgacct atttagctgg agaaacatac 360
 ttgggatcct aatcgtggta attgggatgg ttctgtactt gtacttctgc actanagaga 420
 ctcancaaat a 431

<210> 6153
 <211> 117
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-H12

<400> 6153
 tggtccttgg ccggccaatc ctccaaggga ttttggccaa accaaatggc cttggcttcc 60
 aataaaaaaaaa tccagttccg gttttcaaca aggcggcctt gccggattca atccccg 117

<210> 6154
 <211> 444
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-011-Q1-E1-H2

<400> 6154
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 ataatccggg tgctttccaa gaatcctcca accacccttg gtgcccaagc aagccacaaa 120
 aagtgggcaa accaaagagg acagcaatgc taggaaaatg acgatgacaa agacgagggc 180
 atcgggcaac atacttggtta gccgtaatga cgacggggcca tgctatctag attccggtct 240
 taatgagtac gtctgcagaa agactaataa gtgtataag agcttggtgc tctgcgtggc 300
 gagttgtcaa ccatcatcat gaattcaaga tactgaggag acatcatgat actgaggaga 360
 cagacggcca gagatgangc tagctagatg ccgtttcacc annatattat gtaacaccca 420
 aatctcccat tttaagaaat aaat 444

<210> 6155
<211> 264
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-H3

<400> 6155

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cccccaattta aaatccgttt gacaagacct gcagttgaat ttttaaattt taaattcctg   60
gggcctactt taattgaacg gggaactggt gccactaatt taaaccgttt tgcaattcca  120
atcctttaat taactaaggg cgttgggaat taataattaa aattgtttta ttaatgttat  180
taattttttt aaatgggtct atttacctac tatgtattat tatcgaatta agaggataaa  240
aatataagg attatgaata tatg                                           264
```

<210> 6156
<211> 366
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-H4

<400> 6156

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gtccgcccac gcgtccgccc acgcgtccgc ccacgtttcc ggaagcggca gcaagcgagg   60
atgccgtgcc tgaacgtgtc gaccaacgtg aacctgaagg ggggtggacac ctccgccatc  120
ctcgccgaag cctccaagtc cgtcgccaac atcatcggca agccccgaggc ctacgtgatg  180
gttgtttctca agggttcggg gcctatggca tttggaggta cccaagagcc agcagcttac  240
ggtgagctgg tttccatcgg aggcctgaac cctgatgtga acaagaagct tagtgctggc  300
atcgcttcta tcttgagtc aaagctgtct gttcccaagt cacgcttcta cctcaagttc  360
tatgac                                                                 366
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<210> 6157
<211> 326
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-H6

<400> 6157

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ccatggcttc atcgggtggc gccacggtaa gcacattcct gggcaccgc ctggcgggtgc 120
eggagccaca gaacgggtgc atcgtgggtcc ggttcgggtt cgggttggtc ggcagggcta 180
aacctgctcc gaaaaatgtg gcaactatat cgaactcctc tgaccgaccg ctgtagttcc 240
cccgggccgt ggcgcccgag tatctggatg ggtcactggt cagcaattac gggttcgatc 300
cgttcgggtc cggaagccc gtgggg 326

<210> 6158
<211> 223
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-H8

<400> 6158
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gacatgactg gatgatattc atccagggtt tcacctcttg ttttttttc ttctccattt 120
ttgagggatt ttgttgacag gcgtattggc ctgtctcaga tgaggggttc cttctctgct 180
cttagtagag ttatctccta tgattctgtc catgagacat tgg 223

<210> 6159
<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-A10

<400> 6159
gaaggaggtg gtgctccacg tgtatgacgt gaccaacagt gactccgaga agacgaacaa 60
caccatcctc cagatcaacc gcatcttcaa ggaccgcac ggccctcggcg gcatcttcca 120
cagcgccgtc caggtagtgg gcctgggtcc cctctcccc ttccctcgcc aatcgctcag 180
atcccaggga ccgacgcttg cgtgccgctt ctccagatcc ctaaattctc cgccatttct 240
tgaacccctc aacgcaggtc tatggctagg acgagtggc gttcgggttc tgcgagtcag 300
gcagcggcgt gtttagttgc cccataggca agaaccctat gtacacctac cgggagcgca 360
tcgtcctcgg ggagaccgag tgccgcacgc ccgccgttaa ccggtacctg cgggagctc 419

<210> 6160
 <211> 79
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-A3

 <400> 6160

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 aatccggtaa atccgaacc 79

<210> 6161
 <211> 225
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-A4

 <400> 6161

 agattcaagc taccataaat atattcatac tgccctataa caaattacaa gatcagctat 60
 ggcaatctcc agtaagcatc tgtagtaag acgggggtgc gccattacat gtcactgcaa 120
 cattagacta atcacagcta tacaggctgc attggcgtag gtctgacaag taggtgaact 180
 tgcattctca acgacaggga cgcattgcac gaggggtgggg ggggg 225

<210> 6162
 <211> 361
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-F10

 <400> 6162

 cttccctacc ccaacgggtc ctggtcaagg tccgggtcct tggccaaaag gaaaaaatg 60
 gcggcttcgg actttgagta ccgttgcttc gttggcggcc tcgcctgggc caccgacgac 120
 cactccctca acaacgcctt cagcacctac ggcgaggtcc tcgagtcgaa gatcattctg 180
 gatcgggaga cgcagaggtc ccgcggcttc ggcttcgtca ccttctccac ggaggacgag 240
 atgcgcagcg ccatcgaggg catgaacggc aaggagctcg acggccgcaa catcaccgtt 300
 aacgaggccc agtcccgcgg cggccgtgga ggcggcggtg gcggatacgg tggcgggagc 360

<210> 6163
 <211> 317
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-F12

<400> 6163

ccaagcctcc ggtttaagca attcccgaac ctgttaaaaa tccgacattg cctaaccgga 60
 tccaacaagc cttaacggca aaaacaacct ttgccaaatt ggaaaacctg gcatgataac 120
 cgtataactg ccgttcgatg cagtcaattg tgcaaaccag catcattggc tgctgattgc 180
 aaaatttgca atgcccgatg ggtcattgat ggaaggggac gattgggact gttgggcttt 240
 tatggttggg ccctgtggta atttagacat gtcgaataaa cgcgatacga gcaatgaaag 300
 atcgatgctg atcattg 317

<210> 6164
 <211> 438
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-F2

<400> 6164

agcacgacca caaccgggtc aacaacggca aggcaaagga ggaggaaggc gcctccggca 60
 aggtcaacta cgagaagaag gagaagcacc acaggcacat ggagcagctc ggccagctcg 120
 gcgccatcgc cgccggcgcg tacgctctgc acgagaagca caaggccaag aaggacccgg 180
 agaacgagca cggccaccgg gtcaaggagg aggtggccgc cgtcgccgcc gtgggctccg 240
 ccgggttcgc cttccacgag catcacgaga agaaggacgc caagaagcac gccacaact 300
 gatccgtcgc aggctgcctc agccgaagca gcagcacatc gtcgcggttg ctgtttcatc 360
 tgttccccca acctcgctgt cgtctacggt ttgccgggca ggccttgatt tgaggctttg 420
 agctaccgat atttcac 438

<210> 6165
 <211> 383
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-011-Q1-E1-F4

<400> 6165

cgaccaaacc tccgaaaaaa aatgggaaag tgtaataatt caataaaciaa tttaaaaaag 60
ttaccccaac aaaaggcaat tgttgaagg ccaaattaag aaaccggtaa actggtaaaa 120
cctaagttaa aattaattta attatataat taaaaaaaat ttaattgtaa agtaaaattg 180
taaactctgaa tgtttatgcc actttgattt gattttaagc gtangggaaat cttctgattt 240
tgcgggggagt aaaccactaa aggttcattg tttgattttt cattatatgt ggcacagaaa 300
tatcttccct ttgataaaac aactaaggga gttctatttt tttgacatca gataaaaata 360
ctttttcacc tttcccgttt gtg 383

<210> 6166

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-F5

<400> 6166

gggaaaccat ggaaattcca caaagtattc ggtccattgt ttgtctcaat ttgccagct 60
tctctggtgg actaaaccct tggggaacac caagtaagag gaagcaaaga aaacgagact 120
tggtgatgcc tccacttggt gatgatggcc ttctggaggt tgtgggtttc aaagatgctt 180
ggcatggcct tgtcttgcta tctccaaaag gccatggaac tcgccttgct caggctcacc 240
gtgtccgatt cgagttcctc agaggcgcaa ctgatcatgc ttacatgaga atggatgggg 300
aaccctggaa gcagcctctt cccacggatg atggcaaagt cgtggtagag atctcccatg 360
ctgggcaggt gaagatgctc gcgaacaaag actgcat 397

<210> 6167

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-F7

<400> 6167

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 gacaagcctg gaggttgcac tctagctcat gccccaggta cagggaacac atttatgctt 120
 ataagcttca ttcagagctt catggcaagg tatccatctg caaggcctct tgttgtgctg 180
 cccaaaggga ttctaggtat atggaagaca gaaattaaac gatggcaagt gcaggatata 240
 ccagtgtacg atttttactc tgtcaaggct gaaaaaagag tagaacagtt gcaaatcctc 300
 aaatcttggg aagacaagat gagtatacta tttcttggat acaagcagtt ctccacaatc 360
 gtcactgatg atgggggagc caatgtcaca gctgcatgac gagacaggct g 411

<210> 6168

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-F9

<400> 6168

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 agatcaagag agagaaagat aagtagagat ggtggggctg cagtacgacg tcgtcgggaa 120
 tccattgggc gcggtgcgcg ccaccttcga gaggacggcc gccgccgctg ctgcggagtc 180
 tggaggagcc gacctgtggg cggcggttccg tggcaaagac tggggcgccg gcgacctctt 240
 ccgctccttc ctcttcgagc aagacgggtc tggcaagggt ccggtgttgg attcgtcaaa 300
 tcttggattg atcaaaccga acacctggg ccggtatcgg ggaatgggtc aggatatgct 360
 tgggaatgag tactacattg gtgctttcaa ggatgggtca acttggagga caaacaagta 420
 gcctgacttc tcaccgtact ca 442

<210> 6169

<211> 347

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-G10

<400> 6169

gaaaaccctc cccaaccttc aaatcgctat gcaccccgtc aaggtgtacg ccgaccggcg 60
 gtcgcaacct tcccagctg tcatcatctt ctgcagggtg aaccagatcg atttcgagga 120

ggtcacggtg gatctgttca agtctcagca cctcacaccc gaattcaaaa aaataaaccc 180
aatgggacag gtacctgcaa ttgttgatgg aagattcaaa ctatttgaaa gtcatgcat 240
tttgaggtat cttgcatcgg ttttccttgg agtagctgac cactgggtatc cttctgactt 300
gttcaccaga gccaaaattg agtcaatctt ggattggcat cactcaa 347

<210> 6170
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-G11

<400> 6170

tcagccaacc cttcggccaa gccttcgtta aagccccccc cgggtaatca atttgggtat 60
gggttaactt caatgccgga aataaattgg gatttggaac caccgggttg ggataggaag 120
ataagcagca gttacatcac ctgccttata ggcaacagga tcaaggcttc ggttcgtcag 180
atcttggtga tgcccaactg tgaaagcttt cctatttctt ggatgatagc agatacggat 240
gactgggtgc cccgcagaat tgcacctttt atatggctga accgtgagcc cgctgagagg 300
cgtgctgcag acacaactag agagatgatg ccaggggaag cttccacatc caaggccatt 360
gcaaagaaca agtcgagtcc gctgccgtct tcaaaaagaa tcaccaa 407

<210> 6171
<211> 256
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-G12

<400> 6171

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tccgcgtccg gaacggcagc ctcaattcaa tgcgcctgcg ccgcgtgttc gacatcttcg 120
actgcattgg ctacggcgag atcaccctcg acgatatggc ctccgcgtc tacgcgtctt 180
gcctcgggcg cgtatgctcc ggtctggagg cctctgttgg cgggtacatc ccggccggct 240
ccgcggggct ccactt 256

<210> 6172
 <211> 404
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-G2

<400> 6172

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gctgccaggt tggctttggc gagcaacgac gacgacgacg gcgctcagga ctcaggtgct 120
ttcggttcag gcggaggagg gcatggagcg cggcgactgc cagttcacgg tggtgccgcc 180
gcggcagtac gacgaggccc agttcatgca ccagctgatg gtggccggcg accagcagga 240
ccccgcgggc gcggggcggg gagctgccgc cgccggcggg gagaggaagc ggcggttcac 300
ggaggagcag gtgcggtcgc tggagacgac gttccacgcg cggcgcgcca agctggagcc 360
ccgggagaag gcggagctgg ctggggagct tggcctgcag ccgc 404
  
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<210> 6173
 <211> 416
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-G4

<400> 6173

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cggcaaaaat tgaaccttgg ccatggcagg tgccaagaac caatccgaaa ccaaagggtcc 60
ataaaccaga ataacatttg gtacccaaaat ggggtcaaag gtaaggtatc cctaaaaatt 120
tggttaaggtt tatgtaaaaa agataagggt ttgtcactag catctgtttc caatggacaa 180
atgtttctaga ttctaaaagg tcaacccaaa aatattttta gattttttga taaatttagt 240
tataccaatt tgatggacca ttctaccttt cacagcttcc atctgtaaac tataagaatc 300
ttctacaaga actagttcag aaggaaggct ttcccttgcc tatctataat acagcctcgg 360
atgtctcgaa ctattctgct gccttcgtat caactgtgga aatccatggt gtaact 416
  
```

<210> 6174
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-G5

<400> 6174

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ccatctgtgg agctggagtg gtgaagggct tccagcaggg gctttacatg ggcaacggcg 120

gtggcgccaa tgttgcgcc cccgggtaca ccaaggggga tggccttggc gctgagattg 180

ttggcacctt catcctggtg tacaccgtct tctcgccac cgatgccaag aggaacgcca 240

gggactccca tgtcccatc cttgccccac tgccaattgg gttcgcggtg ttcttggtcc 300

accttgccac catcccatc accggcaccg gcatcaacc ggctaggagc cttggcgccg 360

ccatcatcta caaccgggat catgcctgga gcgaccattg gatcttctgg gtcggcccc 420

tcatcggcgc cgc 433

<210> 6175

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-F1

<400> 6175

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gaagacactc actggcaaga caatcaccct tgaggtggag tcttcggata ccattgacaa 120

tgtcaaggcc aagatccagg acaaggagg catcccaccc gaccagcagc gcctcatctt 180

cgccggcaag cagctggagg atggccgcac cctggcggat tacaacatcc agaaggagag 240

cactctccac ctggtgctcc gcctcaagg tggcatgcac atttttgtga agacattgac 300

tggcaagacc atcaccttgg aggtggagag ctctgacacc attgacaatg tgaaggccaa 360

gatccaggac aaggaaggca ttcccc 387

<210> 6176

<211> 248

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-D12

<400> 6176

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cctgatactg ctatgcataa tgttggtgct gtaatgcat ctccatatga gatggtaggg 120
atgggtcatca cagattcttg cgtcgcacaa cactgttcca attggggcac taaccactgc 180
gcttgctaata acctcaccag attatcacag attgatgcat ggtgacaatc tgtatcctct 240
tggtgaac 248

<210> 6177
<211> 405
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-011-Q1-E1-D2
<400> 6177

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gcctccaaca tggcgatctc ctccacggcg atggccggca ccccatcaa ggtgggctcc 120
ttcggcgagg gccgcatcac catgcgcaag accgtgggca agcccaagggt ggcggcgctcc 180
ggcagcccct ggtacggccc cgaccgcgtc aagtacctcg gccccttctc cggcgagccc 240
ccgagctacc tcaccggcga gttccccggc gactacggct gggacaccgc cgggctgtcc 300
gccgaccccg agaccttcgc caagaaccgc gagctggagg tgatccactc ccgctgggcc 360
atgctcggcg cgctcggtg cgttctcccc gagctgctct cccgc 405

<210> 6178
<211> 447
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-011-Q1-E1-D4
<400> 6178

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ctaacaaaaa gggaaccaac ccggaatac aattccccct ccaaccgtta gaactcccaa 120
attaaaaaaaa acgaagggcc cgccggtccg gttccctcc ctggcccgtt caacaaaaaa 180
atttccggga gtccctcaac tccaagcaag ggttccgatg gcgctgcaat ggatgatcct 240
ggcgtgcgtg gtggcggtgg aagctgcggt ggctgcgctg gtcacgctcc cggtgccccg 300
cgctgtgcgg ggccagatcg tcgcgctcac gtccctgttc ctgcagcccc tgtccagtgt 360

gatacccttc gccgccttcc agatcctcga tctctactgg aagaaggagc acagactgat 420
gtgcacctcg gagattttgc acgccga 447

<210> 6179
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-D5

<400> 6179

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gccacggcgt gccgcagag accatggcgc gcgcgacgga ggcgcagcgc gcgttcttcg 120
cgctgccggc agagcgaag gccgccgtgc ggaggaacga ggcggagccg ctccgggtact 180
acgagtcgga gcacaccaag aacgtgaggg actggaagga ggtgtacgag ctctgtctgc 240
gcgagccgcc gccgccggct gccgtggccg acggcgagct cgtgttcgag aacaagtggc 300
cccaggatct gccgggcttc agagaggcgc tggaggagta cgccaaagcg atggaagagc 360
tggcgttcaa gctgctggaa 380

<210> 6180
<211> 260
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-D6

<400> 6180

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tccataccgt agttaactat cttcacattg ttttctgttt tttttggggg attgtatcaa 120
tcttaccttg actgcatcat ctatggcact gcatgatgat gccatctttt gcttgtgttg 180
aaacacgtag cctatccaag acaatgtggg tcctatacat ctgtagccaa ttttggccac 240
tagcatgcca ttggacactg 260

<210> 6181
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-D8

<400> 6181

ggcgcggcgg aaggcggagg agaagcgcgc gtccgcggag gccaaagcgg gcaccaaggt 60
ggcgcgagtg ctggagctcg ccaacttcat gagggccgtg gggagggcgc cctccaccaa 120
gcgctccttc ttctgaaccc accggcctct tcttcaccag ttctctgtgc ttgccgccgc 180
cgcctgtgca gttcagttca gttcagttgt cctgtgggtc ggaccgttca cgccttact 240
ccacgggatc aggcacagtg atcagtgccg tgctagctgt gtggaacgct tgttttagtg 300
ttgtatccac atgtacgatt tgtaacgttt ccttgcttct cccgtttcgt gttttcgtat 360
ggtatctatg gtattgcaaa gtccatggcc acgatagaca g 401

<210> 6182

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-D9

<400> 6182

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cgccggccgc tggcgccgcg tgcagggccg cgggcaagg gaaggagtg ctcaagtggg 180
tcgtgttcca gcccttcgag gagatcaagg gggagctcgc cctcgtgcc cagtccctg 240
acaagtcgct cgcgcgccac aagttcgtcg atgactgcga ggccgccctc aacgagcaga 300
tcaacgtgga gtacaacgcc tcgtatgcat accactccct cttcgcctac ttcgaccgcg 360
acaacgtggc tctcaaagga tttgccaagt tcttcaagga atccag 406

<210> 6183

<211> 198

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-E1

<400> 6183

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ctatttggat gtagcaacgt tatcaccagc tgtatacgct ttttaatcga caacatttga 120
 ataatatgta cataacatta tgttgtgctc tgttctctgt ctgtttgatg tgcttatggg 180
 ttttgatctg tagcttac 198

<210> 6184
 <211> 395
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-011-Q1-E1-E10
 <400> 6184

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 gctgtacagg cggattgctg aagtaaaaga gaaggaacgg agaaggactt tggaggagat 180
 actctatgct ctggttgctc agaagttcgt tgaagctggg gtctctctgg ttccagcact 240
 ctcacgtccc accgatcctt ctggaagagt tgatcagtgg gcagaaactg tggaagaaaa 300
 gcttcaacgt ctgcactcgc atgaggccta tgaaatgacg gagaatcacc tcacctcat 360
 tctggggcag cgtcaagggtg acgccactat cgcag 395

<210> 6185
 <211> 357
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-011-Q1-E1-E11
 <400> 6185

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 ggactggcgg tgcggtgcga gaagagcgac aagcagaaga ggcagccgct cgccgcgctc 120
 gtgccccgcg agcagcgctt catgttcgag ggagacgagc tctgcggccc cgacatatgg 180
 aatacaacct ggtatcctaa ggctgcagat catgtaacta ccgagaagac atggtatggt 240
 gttgatgcaa cagacaagat cctaggcagg ctagcatcca ccattgcagt acatatcagg 300
 ggaaagaatg aaccactta cactcccagt gttgacatgg gaacctttgg taatggg 357

<210> 6186
 <211> 388
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-E2

 <400> 6186

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 ttgcatacca acaacaacaa caattgcaac agttttctacc agcgctcagt caactagcca 180
 tgggtgaaccc tgccgcctac ctacaacagc aacaactgat ttcatctagc cctctcgctg 240
 tggttaatgc acctacatac ctgcaacaac agttgctgca acagattgta ccagctctga 300
 ctcagctagc tgtggcaaac cctgctgctt attgcaaca gctgcttcca ttcaaccaac 360
 tgactgtgtc gaaatctgct gcgtacct 388

<210> 6187
 <211> 318
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-E4

 <400> 6187

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 gccccaaaaa agggggccatc ccaaattcaa taactttact ttaaaaaaaaaa gtggaaaaaa 120
 ccaagggcgc gaaaatgaaa aaaccctttt atttttttaa taaaaaaggc accacaagga 180
 atctaccca aatacaattt cccggtttta aattaaaatt ctaattaaca aggataaaat 240
 taacaagtta ttcaagttgg tcaataaact gcaaaattca ggcataatcac cccagacatt 300
 actctacaat acagtact 318

<210> 6188
 <211> 422
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-E6

 <400> 6188

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 ccctactctg gaaatcctga aattctggat gaggaagaat ttggagaatc ttctgccagc 180
 aggaccaag atgatgaatt atctgcagca gagcagcttg gattaatga tatgtcgtcg 240
 gaatcacagt tcctcttctt ccagttgcc aacctctctt ctttaccgag gcagccacaa 300
 tcaggtgctg accctaacga agtccgcat gagaaacgtg aggacatgag gccatcatcg 360
 cacaatggct cgaaactcaa agaagttcct gaaggctata tggggaaaat gctccgtata 420
 ta 422

<210> 6189
 <211> 348
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-011-Q1-E1-D11
 <400> 6189

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 tgccctgccc ctgcgcgggg ctgcagggct tgtacggcgc tggcgccggc ctgacgacga 120
 tgatgggcgc cggcgggctg taccctacg cggagtacct gaggcagccg cagtgcagcc 180
 cgctggcggc ggcgccctac tacgccgggt gtgggcagcc gagcgccatg ttccagccgc 240
 tccggcaaca gtgctgccag cagcagatga ggatgatgga cgtgcagtcc gtcgcgcagc 300
 agctgcagat gatgatgcag cttgagcgtg ccgctgccgc cagcagca 348

<210> 6190
 <211> 376
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-011-Q1-E1-E8
 <400> 6190

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 gtatgtcttc attggtgcc cagcagattgt ggtctacgcc actctctgat tcgatagggg 120
 caaagtgcct caagggcata tggaactact gagatgcagt ttcactgttc tgccgtgtga 180

tatccatcgg agatgtttgg ttttgtgaaa gaagtatttc gaacatgtgc acaacactgg 240
aggatagaca tgctgggttag agagttacag tatgtataaa gatttttttc tgcaagtga 300
gatgtaatgg gcaatacggc cggggacttc gtgaatcaga tgctacttaa gtcagaaaac 360
aaagcctatc atgctg 376

<210> 6191
<211> 304
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-B7

<400> 6191

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gtttgctgct accataaaga agtggaggcc acctgagcca tacaagggaagggtatcag 120
atatatggat gaagttgtcc gaaggaagga aggaaaagcc gggaagaaga aatagaaagt 180
gttttttttc cctctcctta cttcatttca attttccac tgtaatgggtc ttcgtctgct 240
aaggctgaac ctaagaaata tattgttctg tgctgaacgt ggcatataga tgtacacttt 300
gagc 304

<210> 6192
<211> 386
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-B8

<400> 6192

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tattcccgtc gcatgtgcgc gcatgggct gcgcgtggg cgtgggctcc aagcgcctga 120
ccagcggcgt gatctccatg accgtcagct cgctgtccaa ggccatcacc atcggcggcg 180
ccttcttctc ctacgccggc gtcacgggtc tcgcgtgggt gttcttcttc accttcgtcc 240
cggagaccgc cggccggacg ctggaggcga tgagcaagct gttcggcgcc atcgacgacg 300
agctgaaacc ccaggacggg gccacgacag acaagcataa gctcgaactg gccgcctacg 360
gcaccatcta acttcacatt attaga 386

<210> 6193
 <211> 301
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-B9

<400> 6193

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cgatgttgct tttaatatta tagagaaaga gcttgggctt ccactggata tggttttctc 180
tgagataaca ccagagcctg ttgctgctgc atctcttggg caggtttacc aggctaggct 240
ccgctccagt gggaagattg ttgctgtcaa agtaciaaaga cctggagttc aagcagcaat 300
t                                                                 301
  
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<210> 6194
 <211> 330
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-C1

<400> 6194

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tgtcattgat actcttcaat gtttccaact tccaagtgaaggaggattacat tttgaatttt 180
tgtattcgct atagctcaga tcaaatttca cacatatctc ctcttctctca gttaccgctg 240
aaccaaatac ctataatctt ctatgtccaa cttgggtttac agatgtacat tttgtccatc 300
ataaaagcta aatggagcca ggttcttttaa 330
  
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<210> 6195
 <211> 409
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-011-Q1-E1-C11

<400> 6195

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ttggtgttta aaggggaaaa aagtccatcc aaagatttta ttagctcaag gcaaaacctt 120

taaaactggc ctgctgctgt ttggtggtga tgaaaacaca aaaatggaag ctgacaagcc 180

agtgaatagc tgtgtattgg tctggcaagg tagtgtggca aagcccacct tccacagacc 240

acaggttcac tgtacataat tgccggagtg aggctgcagc taagaagggtt ttcgttgatg 300

cttctgttcc tcactactgg gaccttgctg tcaatttctc agaagattct tcttgagcaa 360

agtgttcaga accttggtag cgtctgctga cctttgctgg ctacatgct 409

<210> 6196

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-C2

<400> 6196

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cttaccttta tggtctcgct acaaggaaaa acatgcgatt tcaagtttca tatggccgta 120

acagtgatca gcagcaccca aactacaaa tggtttctga tcttctgaat tcagcaacac 180

ttgccctaga aagagttggg gaagaaaaat atatgctttt aaacaagatc cgtgacttaa 240

atgagttgtc cagaaaggag gttgatgaga taataaaagt gtgcatgaag caagattgca 300

tatctcctaa cgataacatc cgtaaaagga ggtacattgc aatgatagat ttgtgttgca 360

tggctggcaa ccgagaccaa ctcatcacc ttctactcca aataacggga tgtgccgtta 420

<210> 6197

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-C4

<400> 6197

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aataagtgat cctgcaaaac ttaactcaaa ccaacacaaa cttgggctaa aatgtgagtt 120

agaggggaatt agaaccaagt ttgagagtag agagaagaga gaagttcctt tcacttgatt 180
gctccatcaa gatttaattt agatttagag caatatcaca agtgaagaat tggaacaaag 240
aagagataaa gattgcaata atgtaaatgg cacaagagac atgacaattt tattccgtgg 300
ttcgggtcaag cataatatgc ttgcctactc acgttggtgc gtcccaatga acgaggggtg 360
cactcaacct ctctcaagt atccaaagac caaacttgag tatcttagtt cctcctaagg 420
ttttaaaata tccccgattg tgagga 446

<210> 6198
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-C5

<400> 6198

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tatactcatt ctacgcaaca gagttgccac aactgcggac atggaatctg cgataactgc 120
gagcatgacg gtcaagacag tcttcgtgtt tctctgcta ggggaaacaa tgaattggag 180
actcgactga ttgcgtacgg caaggacgac aaaacagcca tgcctccaag tgctctgttt 240
ctgcaagagg agaaagccta caccctgcc aattccagctg gcataacgga ggaggataat 300
atactgcaga aaagctatat ccatccattt gtttgatcgg aagaaacggc cgcatttagt 360
atgctgcccc tgtgaggaga gcttggccta aact 394

<210> 6199
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-C6

<400> 6199

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aagttctctg atttcccaca gcttgaagg tttaactta gaactgaagg gaagacggta 180
gccgtaggca aggttggtga tgttccgcct gctggcagcc caacattctg agcttaagcc 240

aattttgaac aggatggata atcatgaagc agtgcgttgt cttgagatac ttttctttgg 300
gagaagtgag attagttgag cataggtttt ttccgagccc ggcttgagaa tgggtctatgc 360
cttaatgggt taagcaacaa gctgttttag attggttcca taaatg 406

<210> 6200
<211> 370
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-C7

<400> 6200

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cgggctcaag cccgccgcgg cagtgcgcga ggccgccgcc gcctcatcgc cggcgaagcg 180
ggtgcagctg gccgcgcccg agggccgcgc cgccgctctg ctgggcttgg cggccgtctt 240
cgccgtcacg gccaccaccg ggtcggccaa ggccacgac ttcgatgagt acctcgagaa 300
gagcaaggcc aacaaggagc tgaacgacaa gaagaggctg gccaccagtg gagccaactt 360
tgcgcgcgcc 370

<210> 6201
<211> 420
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-C9

<400> 6201

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atgttctgtt ttttggtgca tgcacactac tgtataactt tagggcctgt ttgtttcagc 180
ttatagatta tataatctga attataatct aaattatata atccagatta taatctagat 240
atattataat atatatgtag ttgtttggta gtttagatta taaaaatgta gattattcac 300
aaagacaaca atacccttat tgcttattta aggtgagaaa aaaaggatgt catatatgtt 360
aatttctatt tacattacca tgggtagtag gtcttttgcc aaaataatct caaataagct 420

<210> 6202
 <211> 375
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-B5

 <400> 6202

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 agttccccga cgagaagttc gtgcgcaagc acaccgccc cggtgtgctc tccatggcca 180
 acgccggggc caacaccaac ggctcccagt tcttcactg caccgtcgcg accccttggc 240
 tcgacggcaa gcacgtcgtc ttcgccagg tcgtcgagg catggacgtc gtcaaggcca 300
 tcgagaaggt gggcaccgc aacgggtcca cctccaaggt ggtcaaggtc gctgactgcg 360
 gacagctctc ctaga 375

<210> 6203
 <211> 210
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-H8

 <400> 6203

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 gcgcttttga tcgcacgggt cacattgcac aactgtgctt agtttttctg cctctacttg 180
 tcgcgtcact tgtgggtgtt tctcgagttg 210

<210> 6204
 <211> 384
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-A1

 <400> 6204

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cgccatacag ctgctgggct tcttcatgat gaccgtcttc atgctcggcc tcgccatccc 240
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cccggcgcgc ctgcgtcca actg 384

<210> 6205
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-A11

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acgggaaatt cttttaaggc ttttaatttat gagcttatgc ctaatgggaa cttggataaa 180
tggtacatc acaaagacaa tgaggcactt ccaaagcgtc taagcttagc tcaaagaatt 240
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accatccatt gtgacttgaa gccaaagcaac atccttctcg gtgacgatat gaatgctgtc 360
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ttt 423

<210> 6206
<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-A4

<400> 6206
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atcaagatga gccgtggcgg tagcgcgggt ggtgggtcaaa gttctctggg ttacctcttt 180

ggaagcgggtg agccccccaa accagcagtg gcaccagctg taagtgtctc acctgtgtgt 240
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gctgtgtgggg ttaccagcca aaccaataac taccacaggg ccgacgggtca gaacaccgga 360
aacttcctta cggaccgtcc ttcg 384

<210> 6207
<211> 378
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-011-Q1-E1-A5
<400> 6207

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gggctacccg ggccgcaagt tcttcgacct gctcggcctc gccggcaccg tcaaggacgg 120
cgtctacatc cccgacgtcg acaagctcga gcggctcaag ctggccgaga tcaagcacgc 180
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gtgggggtggg tgagctccta gggacgtacg gctgcagcgg atcagacgcc ttgcctcgca 360
gattggagggc gaaagaag 378

<210> 6208
<211> 118
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-011-Q1-E1-A6
<400> 6208

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gttgcaagta accatttggg aaaggaaaat ggccagaagg aacatcggat tcccattg 118

<210> 6209
<211> 387
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-011-Q1-E1-A7

<400> 6209

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ttgcgcttct tgcgcttttt gcgagcgcaa caaatgcgtt cattattcca caatgetcac 180
ttgtccaag ttccattatt acacagttcc tcccaccagt tacttcaatg ggcttcgaac 240
accagctgt gcaagcctat aggctacaac aagcaattgc ggcgagcgtc ttacaacaac 300
caatttccca gttgcaacaa caatccttgg cacatctaac aatacaaacc atcgcaacgc 360
aacagcaaca acaattccta ccagcac 387

<210> 6210

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-A8

<400> 6210

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cggagatgtc ttcagctttg gagtcacgct ccttgagatg ttcacaggga agggccccac 120
cgacgccatg tttgaggacg gattgacctt acagggcttc gtggagatag cgtttccaga 180
gaagctgatg gacatcgttg atccagtact gctgtccact gatgagaggt tcgcaagaaa 240
gccgcgacac agaagcgttg gaggggaaga gattgagaac gccatagctt ctgtcactaa 300
gctcgcgctg tctgcacca agctaacc atcagagaga aagcccatgg gtgatgccgc 360
agccgagatg cgcatgataa gggactgcta tctcgc 396

<210> 6211

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-B10

<400> 6211

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tttcggaatg ctaataaaat acctttttga gaaatttcca aattggcaag agattggttag 180
ccaggccatt ggagaccttc agattttcta taaagcatcc aagcatagat ttgacaatga 240
tccagaattt aaagcaaggg ctcaacaagg agttgttcgg ctacaggagg gagaagagag 300
atatcgagaa gcatggaaaa agatttgtga cattagcagg agtgaatttg acttgggtcta 360
caaacgccta aatgtggtgc ttgaagaaaa gggggagagt ttctataatc cttatatcc 420
tcaag 425

<210> 6212
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-B11

<400> 6212
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gggccggcgg cggttggaat taaatcccg cgggattgca tcaattcttc aaacccttac 120
cacaattgca ctgacaacgg cctccgcaaa tcccccaagg ccaggcaccg cctcgacgac 180
aagctccccg actcgtggaa gcgcccggcc gagcaccgca ccttcaccg ggactgcac 240
aacgcctgca acccctacca cgagtgtctc gactactgct tcaagcgcat cgccgacgcc 300
aagtcagggc ttgagcgtgg ggagcaacag ccaccagctg acgtggccac cgctgccggc 360
acgtctgatg ccgtggagca gcagcaactt gaagataacg a 401

<210> 6213
<211> 337
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-B3

<400> 6213
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tcctccaata actcaaattc ggtaaaaccg gaaaccaatt acggaaggat aaaaaccgga 120
acccggcaac ccaaaagaag gcccgggcgc ggaataacaa ccctggccgc aaccccctga 180
ttctccccgt gaacaaaaac aagtttcaac ctccccttgt ggctgggagt ccgcgccgca 240

ttcaagttcc ccatcgacaa ggacgtcagg aacttccagg tcctcaaaga gatgtacaac 300
gagtggccat ttttcaaggt caccctggac ctgctgg 337

<210> 6214
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-B4

<400> 6214

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ggggaagaag atcctgggtca acccccccgtt gggcaatgtc caagaaagtg catatactat 120
gtgacgcctt gccaacgcac tattttggag gatgttcttg ctagtgtgtt gatgggtgcct 180
tacgatcttg ctgaagcagc agttctggat tccctccttt caaaagcgaa gttcgagaat 240
aacaggtata agaagcccca aagaggagca aaatcatcct ccgattatgt tgattggatg 300
tgatctgatc ccgagacaca aagaggatgc cagattcagc cgaaggcagt tcggtagatt 360
tatgctgggtt tgcctattct ccttgggtcag ttgcccagata gttataaaaa tggaata 417

<210> 6215
<211> 367
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-H7

<400> 6215

gaatatactt gggatctttg atctgcgagg ctttcgggtt gaaaatggtg atctccagtt 60
cctaaagttt ttgatggacg ttttttacta ttactacccg aagcggcttg gccagttct 120
ttttgtcgat gtcctatttg tttttcaacc aatgtggcag gttgttaaacc ctctattgaa 180
atcatatgcc tccctggtaa gattttgtga tgccgagact gtgaggaagg aatacttcaa 240
agaagaaacc gtgcctcctg atttccgcga ttaggtgaca tgattatttc ttcagtaatt 300
gcaagtcagt tctacctctg cttttgtgta acgattgaaa ttctaaattg tgcagattat 360
ttttagt 367

<210> 6216

<211> 388
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-010-Q1-E1-G2

 <400> 6216

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 gaatggaatc cctagccgcc acctccgtgt tcgcgccctc ccgcgtcgcc gtcnccggcg 120
 cgccgggccct gggtangggc gggacgggtg taccaaccaa gcggacgagc agccggagcg 180
 gaaccagcgg ggtgaaatgc tctgctgccg tgacgccgca ggcgagccca gtgattagca 240
 ggagcgtcgc ggcggcgaag gcggcggagg aggacaagag gcggttcttc gaggcggcg 300
 cgccggggag cgggaagggg aacctgggtgc ccatgtggga gtgcatcgtg tcggaccatc 360
 tcaaccccggt gctcgcctac cgctgcct 388

<210> 6217
 <211> 219
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-G3

 <400> 6217

 cacgcgtcca atcaatctaa acatcaatcg taggatcgct aaggaccctc aagccagaga 60
 gaatggagtc cctaaccgcc aacgccgtgg tcgctgccac gcgagtcgct ttccacgacg 120
 gcagggccct ggatagggaa gagagcgtgg ttcgatccag acggtcgagc agccaaagag 180
 caactagacg ggtcaattgc tctgctgccg taaaacctc 219

<210> 6218
 <211> 419
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-G9

 <400> 6218

 cccacgcgtc cgcaccgcg tccgagcagc tgaacaaaca tttgactgta tatcaagctg 60
 ttcaaagaca agtagttcat gccgaggatg atgaagatcg attcgggtga tctgatttac 120

ctgatgatgg taaccacttc tgggatgata taaggggtga tgtgttcaact ataacgtatc 180
agaaggctga taacacagcg gagaaggggt ctgttgaggg ttcagcttca gtgccaaaat 240
cttccaaatc agattcttgc agaactttgt ctgaaaaaca gtgtacttct cttcttgata 300
gtattttgca aggagagctt cctgtgatt tagagaaatc aaaccaaaacc tacaatatct 360
tatcactatt acatgtgttg gagggtttga atcagttatc acctcgtctg agactgcag 419

<210> 6219

<211> 290

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-H12

<400> 6219

gaccaagcg tcaaccacg cgtccggtga tagcttatgt acctgacata ttctttcatt 60
ctaattttcc tcattcatct accaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaggg gaggaaaaga aaaaggaaaa 180
aagaaagaaa aaagagagaa ggaaagggca gaaaataaaa aaaagggaaa cagaaaataa 240
aagggggggg gggtcgaaaa ggaaaaaggt taaaggggaa aaccgggggg 290

<210> 6220

<211> 322

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-H2

<400> 6220

caaacctccg gccaaagcctc cgaaaaaatg ccgaaaataa accaccacaa accgttaagt 60
ttccccaagg cttcaaggctc ccccgggggc tgatgactta ggaagatgga ctcatctgct 120
cgaaggctgg aagagaattt atgggatcaa aacatgatcg gaccttgga ctaaaagctc 180
cacccaagat aacggtaacc aaatacacia ggcggctgtc attggtgaca ccattgggga 240
tcctcacaag gacaggtctg gcccttcct caatatactc atcaagctta gggcggttga 300
atcccttgct ttgccccct tc 322

<210> 6221
 <211> 159
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-H3

 <400> 6221

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 ggggatgagg acctaaagtc ttcagggttaa ggtgttcggt aatcttaaata gataagatca 120
 ttcgatcttg taaatgggca ttaaatttta agttcaggg 159

<210> 6222
 <211> 397
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-H4

 <400> 6222

 gcgtccacag aatattaata atataaccac cgatgtgata tgccatggag aaaagagtgt 60
 catcaaggaa ggtcataaga gtttcccaag tgggcattct tcatgggtctt tcgctgggtct 120
 aagttttctt gcatgggtact tggctggaaa acttaaagct tttgatcgca agggtcacat 180
 tgcaaaactg tgcttagttt ttctgcctct acttgtcgcg tcacttgtgg ctgtttctcg 240
 agttgatgat tactggcatc actggcaaga tgtctttgcc ggcggcatca taggtcttac 300
 agttgcttca ttctgttacc tgcagttctt tccatatccc tttgacaatg atgccctatg 360
 gccacacgca tacttccaac agctagctga gacacac 397

<210> 6223
 <211> 419
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-H5

 <400> 6223

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 tggatgtgga attgtggaca catgatgggc ttccttcagc acaactcctg aagctgatga 120
 gagatgtggt tgctggcctt gtgcatctgc atgacttggg aattattcat cgtgatttga 180

agcctcaaaa tgtcttaata agcgcaggag gacctattag agcaaagctt tctgatatgg 240
gtatcagtaa gcacctgcaa gatgacatga cttctgttag ccatcatggg acaggatttg 300
gaagctctgg ctggcgggca cctgaacagc ttcgtcatgg tcgtcaaact cgtgcaatgg 360
atcttttttag tttgggctgc cttattttct attgtatcac taaaggcaag catccgttt 419

<210> 6224
<211> 287
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-H6

<400> 6224

cgggccgacc caagcgtcag gacttcttgg tgagagcgat atgagtgtcc cagggtcaatg 60
ctcatcccag ccacaattta tcaccagcgt tgggaggagt aaccgctcca atggccccgg 120
cactcctctt atcgaaagca tagatgttga tcaaattgtt attccagaga aaaacagttg 180
gaagaactta ttcccatata taaggcctgg atttcccgtc ccaattgcat atattgatcc 240
tggaacttt gagacggatt tacaagctgg agcacagttc aaatatg 287

<210> 6225
<211> 424
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-G10

<400> 6225

cccacgcgtc cggcctttta tcccccccc ctctctctct aggtatgatt gggctgccaa 60
gaagaccttg caatctggct actttttgtg gtcaatgggtg gcatatgggt cgggtctcct 120
aattacatac gttgccttga accttatgga tggccatggc cagccggctc tcctttacat 180
cgtgcctttc acaatcggca ctttcttctc actgggcatg aagagaggcg agctcagaaa 240
cctgtggaca aaaggacagc ccgagagagt gtgcacgcac atgcacccat cccccaagga 300
ttcgctgtgt gcggtcagct cgctgtcgta tacaaggcta acgaccttac ctgatgttgc 360
ctggccccgg agaatgttgc tgatgaccaa aacaaagttt ccagggttaa tgaaggagtc 420
tact 424

<210> 6226
 <211> 78
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-E6

<400> 6226

accacaagt caaggcatgt caacgctact gtgacggtaa ttcctttgac acatattgta 60
 tgtgactgga ttgtctag 78

<210> 6227
 <211> 415
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-F10

<400> 6227

cccacgcgtc cgcccacgcg tccgcaataa tgattgtaga tagatatggtt attattgcat 60
 tgcagttcat ctatatgat cactccagtg cttttgtttc attgtatgct tgcagccttg 120
 cacttcaatt tttgcagtc aaagttctat tctttacttg gatataattac tctcttaaaa 180
 catcaattca ttgttttgca ttcctttgtt tatttgtaga tatgaacaag tcctttgttc 240
 tttaatgggt ttgattttgc tggcttgaac tctttagggt tttgaactaa tgataacatg 300
 tgtagacctg aaaattcgta gactattgta ctgaaccttc tgatgtttgt tcctttcttc 360
 atgtttaggt ttgctgatca atttttaagc aagaaatctg gtatgacgca tgaca 415

<210> 6228
 <211> 422
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-010-Q1-E1-F12

<400> 6228

agcccacgcg tccgcccacg cgtccgccga ggcggggatg acgagcccaa tggaggccac 60
 cccgggtccag ttccacacaa ccggccgcct cagcttctgc tccttttcct ttcccagcgc 120

atcagggagg cggcgattcg cggcggtgag ggcgtccgcg gagacgatgg cgacggagaa 180
gctgggcatc aaggtggagc gcaacccgcc cgagtcccg ctctccgagc tcggcgtcgg 240
ccagtggccc aagtgggggt gcgagaagag caagttcccc tggacctact ccgccaagga 300
gacgtgctac ctgctgcagg ggaaggtgaa ggtgtacccc gaaggccacg gngaggagtt 360
cgtggagatc ggcgcgggag accttgctgt cttccccaag ggcattgagct gcacctggga 420
cg 422

<210> 6229
<211> 361
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-010-Q1-E1-F3
<400> 6229

acacaacagc tccgctcgtc gatcagctct cggctgacaa ctccatcgca attgggtgcc 60
tgccgacaag ttctcgccgc cgcaaccgcc gcggtaaaaa ggggagggag agggggaaaa 120
aactggccca gatcgaaagg tacagcacga aaaagagagg caagagagat aggggaccgg 180
agggcgggcg gccggggccc aagaccgagg ggctcgtgcg caggaagctg atgaggctcc 240
tgtcgtcgt cnccttcggc tgccgtgctg gacccatcga cgacgcgccg ccgcccgtgg 300
accacgccgc cgccgcgagg aggcgccgga ggaagagggc caacaaggcc gccagctgc 360
t 361

<210> 6230
<211> 326
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-010-Q1-E1-E2
<400> 6230

cccacgcgtc cagtacaagg caattgaggg tttccttgct ggaaaaaacc caggacaaga 60
tctatttgac aagattgata catctaggct aaatgctcac ttgaaggatc taatgcctgg 120
gctcactgca aaagtgttcc gtacatataa tgcttcocata acattggacg gaatcttgca 180
tgaagaaaca gaagatggaa ctgttttaga aaaaatcgct gtctatcagc gggcaaaca 240

agaggttgcc atcatctgta accatcagcg tagtgtctcg aaatcacatg agtcccagat 300
gactagaatg aacgaaaaga ttgatg 326

<210> 6231
<211> 416
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-010-Q1-E1-G1

<400> 6231

gacccacgcg tcaaaatcca gatcagcaaa gcggcagtgc gtanagagga tcgtcgaaca 60
gaacagcatg aagatgggtca tcgttctcgt cgtgtgcctg gctctgtcag ctgccagcgc 120
ctctgcaatg cagatgcctt gccctgctgc ggggctgcag ggcttgtacg gcgctggcgc 180
cggcctgacg acgatgatgg gcgccggcgg gctgtacccc tacgcggagt acctgaggca 240
gccgcagtgc agcccgtctg cgccggcgcc ctactacgcc ggggtgtgggc agccgagcgc 300
catgttccag ccgctccggc aacagtgtct ccagcagcag atgaggatga tggacgtgca 360
gtccgtcgcg cagcagctgc agatgatgat gcacctgag cgtgccgctg ccgcca 416

<210> 6232
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-D11

<400> 6232

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ttgaggagac aattcctgag gagcttcaga aacatgccac cgtagaccc tccgtggtag 120
agctgctact ggaaatatcc agatattgtg atctctacct aatggagact gtaattgacg 180
ataagagcga ggaaaatgct ctcatggccc tggagacctc tggacttttc agaactggtg 240
gcctgatgaa agagaagggtg ctcttttgca gctctgaagt tggtcgaact tcatttggtc 300
cacaatttgg aacaaaattt caaaataaca acaaccttga caaaatttcc caaacaaccc 360
cggttaattc aatgcaaact 380

<210> 6233
 <211> 332
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-D2

 <400> 6233

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 aaaaaaaaaa aaaaaaaaaa aaacaaaaaa agggggggcc ccccaaaagg ttcaagctta 120
 agtacccttt caatgaaaat taaaaccctt ccaaaatggc ccccaaattc aattccaagg 180
 ccctctgttt aaaaactcct aaacgggaaa acccttgggt taaccaactt aaaccctttt 240
 gaaaaaaacc ccctttcccc aaccgggcta aataccaaaa aggcctaac cattcccttt 300
 tccaaaaatt tgcgcaaccc taaatgccaa ag 332

<210> 6234
 <211> 436
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-D5

 <400> 6234

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 ttggaacata gttcactgtc tatgatgtc atccaccata tgatggagct gcggtctcaa 120
 agagtcgttc tgcacgtgtg gttggtttga agcaggtctc ccctagagtt cgggctggaa 180
 attatcccg ttcacatatt tcttacgagc tgaatgttct gggctccaga ggtccacgaa 240
 ggatgaactg tgttatggat tccatccctg cattaactgt taaggaatga gggaaaactc 300
 ctacacagac tgaatttcca cttagcagcc ttgactcttt cccatcattt ccattcttca 360
 catctaaatc agctcggata gacagttcaa cgtcgaaatc atccagtcag agggaagata 420
 ggttggtgct gaagaa 436

<210> 6235
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-D7

<400> 6235

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ctcgggtcaa accctaagca gggagttgat ttatccgctg cagccatgag taagttgcag 120
tctgagtctg tcaaggatgc catctcccag attggtgggg atgccaagga gaagaatagg 180
aagttcactg agactgtgga acttcagatt ggtctgaaga attatgatcc acagaaggac 240
aagcgtttca gtggctctgt taagttgccc catatccctc gtccaagat gaagggtgtgc 300
atgcttggtg atgcccagca tgttgaggag gccgagaaga tgggacttga ctacatggat 360
gttgaggctc tcaagaaaat gaacaagaac aagaagcttg ttaagaggct tgcc 414

<210> 6236

<211> 299

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-D9

<400> 6236

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gtgaggcagc gagtgggaga caaggggaaa tggggaaggg agcgcaaggg agcgatgcgg 120
cggcggcggg cggcgaggtg gaggagaaca tggcggcgtg gctggttgcc aagaacaccc 180
tcaagatcat gcccttcaag ctcccgcccg tcggccctta tgatgtccgc gtgcgcatga 240
aggcagtggg gatttgcggc agccatgtgc actacctaac ggagatgcgc atcgcgcac 299

<210> 6237

<211> 300

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-E1

<400> 6237

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acccccacga gtcctatggc cgccaccgcc atgattggga ttaccaacct acgttgccgc 120
cacgaccgcg tctctctcct tccccgggct acgtcgtcgg ccgcccggtc ctgtacgctg 180

cttcctcctc gatgccgcgc ccattcttct tgctgtccc cttcctcctc cgtctctccg 240
tgccggggccc ggggtccgacc aacagcagca ctgaagcgca tccctgccgc cgacaccggc 300

<210> 6238
<211> 390
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-E12

<400> 6238

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tcctctgccg ccatggcgct ctctgtggag aagacctcgt ctggacggga gtacaaggtc 120
aaggatctct cgcaggcgga cttcggccgc ctcgagattg agctggccga ggtcgaaatg 180
cccggcctca tggcgtgccg cgccgagttc ggcccgcca agcccttcgc cggcgctagg 240
atctcggggt ctctccacat gaccatccag accgccgtcc tcatcgagac cctcaccgcg 300
ctcggcgccg aggtccgctg gtgtcctcgc aacatcttct ccacgcagga ccacgccgcc 360
gccgccatcg cgcgcgactc ggccgccgtg 390

<210> 6239
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-C7

<400> 6239

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gggtgttttg aacatcgttc atggcaccaa tgatgttgtc aataatattt gtgatgatga 120
ggatattaag gctgtatctt ttgttggttc caatacagct ggtatgcata tttattctag 180
ggcatctgca gcaggcaagc gtgttcagtg caatatggga gcaaagaatc atgcaattat 240
ccttcccgat gctgatagag atgctacatt gaatgccctt attgctgctg gatttggtgc 300
agcagggcaa aggtgcatgg cattgagcac tgctgttttt gttggcggtt cagaatcatg 360
ggaggatgaa ttagtcaaac gtgcaagtgg ccttgttggt agttcaagaa tggttaatga 420
tgc 423

<210> 6240
 <211> 429
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-B12

 <400> 6240

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 tttttgttga aaagtttagt acttgagtgt caatcatagc tttcgcttg ctaaactatt 120
 gacaatgtat cttgttcttt gttgaaaagt ttagtacttg agtgtcaatc atatttcaga 180
 gtcattgtga tatactgagc ttggagggtt tggccattga tctgcagaag ttcaatacaa 240
 ttggaagaat aagttaaaaa aaacgtgggc caaagtaacc ttcagcagta atgtttgtgt 300
 ggcaaagtct cttccggaga atttggttga tgcaaacctt gtaccactga atatactgtc 360
 aatctgctat cttttccgtg gcctctaact cttagagtgt gtttggtttg agttgaggaa 420
 ttacttcat 429

<210> 6241
 <211> 403
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-010-Q1-E1-B2

 <400> 6241

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 gaattgggca atgttgga aa ggctcaaagg aaaatgggaa tcaagaaaaa tgggtggaat 120
 tgtagcaaaa ctggtgaagt cttaagaatt ataaagggga atctaaaatt aaaactaagg 180
 caaacgatga tacgaagaaa cagcaaagac aatttctcat gcaaattctt tcaacaaatt 240
 ttcattaaag cattttcaat tacattcttt ggtgantggg gtgacaagag ccagattgct 300
 actattggct tggtgctga tgaaaacat ttggtgttgt cctgngtgga atcatagcgc 360
 aagcactctg cactactgct gctgttcttg gtggaaagag cct 403

<210> 6242
 <211> 138

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-B3
 <400> 6242
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 tttctagaga atggcatgta ctccagtgtt acctgtacat tgaccagaaa aaatgtggta 120
 tctagttgcc ttctgtgt 138

<210> 6243
 <211> 411
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-B6
 <400> 6243
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 gcttgatgtt gttgaggggt ttatccaaaa ctgtggacta ggccctacaa cacttgggta 120
 tctccagaaa attcctgata ttgagagatt attaggacaa gttagatcca ctgttgggtt 180
 atcatctttg cttcaactgc cctttattgg agaaaaata ataaagaaac ggattaaaac 240
 atttataatg cttatcaatg gctccgcaa tggatttgac ttgctaaatg atttacaag 300
 agcggaccat ggtatcttgg cgctttataa gattgtggat attccatcat tgagctatct 360
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<210> 6244
 <211> 393
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-C11
 <400> 6244
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 ttgcgattca atagctacta gggatgctgc catgcacacg ttcattgcca atcggcagag 180
 tcttttggca cctgtctgac gatacgacac catcccgaaa gctcagtatc ctgtacaaac 240

ttttcccgat atcattcgta atgaaccagg caggaggaca atcattcaca ggcaagcaaa 300
 ggcctcttga tgtgggtccca gccaaagatcg acgataggtc cccgatattc ctcggaagct 360
 acaacgacgt ggaggagatc atagcgttgt acg 393

<210> 6245
 <211> 426
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-C3
 <400> 6245

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 tcgaatctgt tgaaggctct tcttgattgt ttaggaaagt tgaaaaactt gagaaggtta 180
 attgctgaga cgaatgagct tgaggagcta ccctatacta ttggatcgtg cacctctctc 240
 gtggagctta gactggattt taatcagctc aaagccctcc cagaagccat tgggaagttg 300
 gaaaacctgg aaatcctgac gttacactac aacagaatca aaggcctgcc tacaacaatt 360
 ggccatctta ccaggttgag ggagctggat gtcagtttca acgaagttga gactatacct 420
 gagaac 426

<210> 6246
 <211> 422
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-C5
 <400> 6246

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 ttcatgctac gtcaatttga acttgctcgg tctgttcaat tgccggcctta taatgcaatt 120
 tcattctctg gtccaatcgc tgtttttgtt tccgtattcc ttatttatcc actgggacaa 180
 tctggttggt tctttgcgcc gagttttggc gtagcagcta tatttcgggt catccttttc 240
 ttccaaggat ttcataattg gacgttgaac ccatttcata tgatgggagt tgccggagta 300
 ttaggcgcag ctctgctatg cgctatccac ggggctaccg tagaaaacac tctattcgaa 360

gatggcgatg gtgcaaatac ctccgtgct ttttaacccaa ctcaagctga agaaacttat 420
tc 422

<210> 6247
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-C6

<400> 6247

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ttgcactaat aggtttcatg ctacgtcaat ttgaacttgc tcggtctgtt cagttgcggc 120
cttataatgc aatttcattc tctgggtccaa tcgctgtttt tgtttccgta ttccttatgt 180
atccactggg acaatctggt tggttctttg cgccgagttt tggcgtagca gcgagatttc 240
ggttcatcct tttcttccac ggatttcata attggacgtt gaaccattt catatgatgg 300
gagttgccgg agtattatgc gcagctctgc tatgcgctat ccacggggct accgtagaaa 360
aactctatt cgaagatggc gatggtgcaa ataccttccg tgcttttaac ccaactca 418

<210> 6248
<211> 397
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-A10

<400> 6248

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gctagctgag ctccgatcct cgctagctag ctaggatacc gccataccac aagtcttctt 120
cacaagtta ggagtgcag caacaagaga tctcgatggc ctctgccacc gtgctcaagt 180
cctccttctt tccaagaag tccgaatggg gcgccaccag gcaggccgcc gcgccaggc 240
cgccaccgt ctccatggc gtccgcgcct ccgcctacgc cgatgagctc gtgaagaccg 300
cgaaaacgat cgcgtcgccg gggcggggca tcctggcgat ggacgagtcg aacgcgacgt 360
gcgggaagcg gctggcgctc atcgggctgg agaacac 397

<210> 6249
 <211> 417
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-A12

 <400> 6249

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 gtacgtggga gacagtaaga gggctatgga cgagtacaca tcagagatct tcatgggcgg 180
 caagagcacc atcgtgctgc acaacacctg cgaggactcg ctctctgccg cgcctatcat 240
 ccttgatctg gtgctcctgg ctgagctcat caccaggatc cagctaaaac ctgaggggaac 300
 ggacaagtcc cactcctttc acccggtggc caccatccta agctacctca ccaaggcacc 360
 actggttccc cctggcacac cgggtggtgaa cgctctggca aagctagagg cgatgct 417

<210> 6250
 <211> 410
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-010-Q1-E1-A2

 <400> 6250

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 cccttccttc acggggcgcgc cgctcgcgc aatggtcaac aagaggctct tcaacgtgcg 120
 tggtccctc cgcaagggca ctggcaacgg cgccgtgggc gttgccgcca gcctcctgct 180
 ttgcggccgc cgccgcaatg gccaaagggt gctgctgggc gcaagccacn gcgggctcgt 240
 cttcgagccc agccagttca ccgtcaaagc cggcgacacc atcaccttca ngaacaacgc 300
 cggcttccc cacaacgtcg tgttcgacga agacgaggtg ccgagcggcg tcgacgcctc 360
 caagatctcg cangaggagt acctcaacgc gccaaagcgag acctactccg 410

<210> 6251
 <211> 446
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-A3

<400> 6251

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tagtactcaa tctaagcaac tagaatcaac atcagattcg gctgaagata gcatggatga 120
tagagagcac gctgatgcta aaaggatgga aacgatattt cattttatga tcgcatcttt 180
gaagtctggg cgatcttctg ttctactgga cactattatt aggcttgtgt acccaattct 240
ctcactacag gaaacatcac ataaagattt atcattgctt gctaagtcag ctttcgagtt 300
gctgaaatgg aggattctac atcggccttt tcttgaaact gctattacgt ctattcttcc 360
tttagtcagt gatcctaact ggcgtagcag atctgcactg ttatcgatc tcaggacctt 420
tacctacagg cacacattca tacttt 446

<210> 6252

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-A4

<400> 6252

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gaaacggatt caacagcgca ttcggtttct ttaaaacagc tgaaaatagc atggatgaaa 120
aaaaatcaag ctgatgctaa aaggatggaa aacaatattt cattttatga tcgcatcttt 180
gaagtctggg cgatcttctg ttctactgga cactattatt aggcttgtgt acccaattct 240
ctcactacag gaaacatcaa ataaagattt atcaatgctt gctaagtcag ctttcgagtt 300
gctgaaatgg aggattcgac atcggccttt tcttgaaact gctattacgt ctattcttcc 360
tttagtcagt gatcctaact ggcgtagcag atctgca 397

<210> 6253

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-A5

<400> 6253

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 gaacgtcgtc ggggggaggg gcgttcgctg cgggcagcga tccaaggcag ccgtcgacgg 120
 cgaagccata cgcgccgccg aagctgtcgc ccaggacct acccatcgac tatgcaggct 180
 tcctcgccgt cgccttcggc gtcttcggcg tcatgctccg ctacaagggtg tgctcgtgga 240
 tcgcaatcat cttctgcgct cagtcgttgg caaacatgaa gaactttgag aacgatctga 300
 agcagctttc tatggccttc atgtttgctg ttatgggtct ggtgacgaac tattttggcc 360
 ccgctcgtcc aggcagtaca aagcgctaaa ctgcggaaga acatgtgcta cattcttc 418

<210> 6254
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-010-Q1-E1-A7

 <400> 6254

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 cgggggtgtg tgggagttcg gcaaggacgg cgacacccac ctctcgacg acaacgcaa 120
 gtggctcggc tttggcgcc ggtaccagga cctcatcggc agtaagggcc tggagaccgt 180
 caccatgggc cgtgccgaaa tgaccacggc cgtcaactac ctggcgaaga agacgacgac 240
 gacactagca gagggcgccg aggaggagga ggagctgctg ctgctgcagg cagcggctga 300
 ccccaaagcc gaggagaaga gcaacctggc gaagctagtg atcatggtat gcgaggggct 360
 gcggttcttc accgtgtcnc gcaaggtana cgggggttc aagaagccgc a 411

<210> 6255
 <211> 404
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-A9

 <400> 6255

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 catcggtcgc gtcaccttcg ccaactgcgga tgcgatgcag ttcaccatcg acggcactta 120
 tacgtcaagg agctgttcag tcgcacaatc atcgtcttcg aagtcgattc tcgtggcagc 180

tgtagtcgcg tcggcgctag gtacgatagt agcctttgtg gcggctgcaa tagccgtaag 240
 atttccagtg gagatgtgct gagcattata ttcccagggtg gaccatgggt atcagtatct 300
 caggttctgt aacgaggagt atatagtcgt cgaacattag agcgtgggtt cgtgactacg 360
 ctagtctacg ttgtacctca ttttaagtaga ccttgctact gtgt 404

<210> 6256
 <211> 450
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-B1

<400> 6256

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 ttctgaatgc tgcatacaag tgggaaaccc agccaaaatc tgttattgaa tcctttgttc 180
 tgctgctttc acccttcgcg ccacacttgg ctgaggagct ttggtttcgc ctcgacatc 240
 cacaatcatt ggcctatgaa cagtttccag aggcaaaaag tgagtacctg gaggaatcaa 300
 agcttgtact ccctgtccaa atcaatggaa agaccagggg tacaatcctt gttgacaaag 360
 cgtgctctga ggatgatgct tttcgaactg cagcctcgga tgagaaactc tccaaatatc 420
 ttgatggaaa aggcatacaag aagaaaattt 450

<210> 6257
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-H8

<400> 6257

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 ctctggccat ggcagccatc gtcgtggcgc cgtgcacggc ccagaactcg ccgcaggact 120
 acgtggaccc gcacaacgcg gcgcgcgccg acgtgggcgt cgggcccgtg tcctgggacg 180
 acaccgtggc cgcgtacgcg cagagctacg cggcgcagcg ccagggcgac tgcaagctga 240
 tccactccgg cgggcccctac ggcgagaacc tcttctgggg ctccgcgggc gccgactggt 300

cggcgtccga cgccgtgggc tcctgggtgt ccgagaagca gtactacgac caccacacca 360
acagctgcgc ggaggggcaa gtgtgcggcc actacacgca ggtggtgtgg cgcgactccc 420
acgcat 426

<210> 6258
<211> 429
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-009-Q1-E1-G5
<400> 6258

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ctcaggggtg gtatgcatat ctttgtgaag accctgactg gaaaaacat aaccctggag 120
gttgagagct cggacacat cgacaatgtg aaggcgaaga tccaggacaa ggagggcatc 180
ccccggacc agcagcgtct gatcttcgcc ggcaaacagc tggaggatgg ccgcacccta 240
gcagactaca acatccaaaa ggagagcacc ctccacctg tgcctcgtct ccgtggtggt 300
cagtaagtca tgggtcggtt aagctgccga tgtgcctgcg tcgtctggtg ccctctccat 360
atggaggttg tcgaagtatc tgctgttcgt gtcagtgttg gtttaataat ggaccgggtg 420
tgttgtgtg 429

<210> 6259
<211> 437
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-009-Q1-E1-G6
<400> 6259

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aatgaagtga aggaaccggt gcatttttat tttcgcaagg aaatcgatac tctcttaatg 120
ggaattgtaa gcttaaagct gtggctgtat caagagatga agggttcacg gatgccagat 180
tacataccta actgactttt tttgtggctg gtcctccaaa ggtctcatct gtaattgtga 240
atccaagtga gttgagctca gctcttttga atactttggt aatccctgcc ctcttcatct 300
tcccactcca gttctgtttc atcagctcat catgatttat ttatcattcc tgtgattcat 360

tgcacgatca ttatcaatth gtttctttat ttgcatggac attaatggtt acaaaatgcc 420
gccttcgccc tcctgtg 437

<210> 6260
<211> 405
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-H1

<400> 6260

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aagaccgcgg agaacttccg cgcgctgtgc acgggcgaga agggcgtggg caagtccggg 180
aagccgctcc actacaaggc ctccaccttc caccgcgtca tccccgagtt catgtgccag 240
ggcggcgact tcacccgcgg caacggcacc ggcggcgagt ccatctacgg cgagaagtgc 300
cccgcgaga agttcgtgcg caagcacacc gccccgggtg tgctctccat ggccaacgcc 360
gggccaaca ccaacggctc ccagttcttc atctgcaccg tcgcg 405

<210> 6261
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-H10

<400> 6261

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ggtcgcggca ccggcagttc cgcgcccag ccatgacccg cgtcgacgac ctccaggagg 180
tcttctcggg cctgcagtcc gcgcgcaagg actcacgctc cgcggacgcc gccgtcctcg 240
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cctcctccct gcagggcaac gccagggaac tgcgggattc gccttccgat actcttcgtc 360
tgctgcagtt ggtggtggcc gaggaggagg atgacgccac gagcaagatg gtcgagcagc 420
agcagcagca gcccga 437

<210> 6262
 <211> 415
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-009-Q1-E1-H11

<400> 6262

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 ggtgcggaag gggaagtcac gcaagggctg cctctactac tcgtcagtgc tcaagtcccg 180
 cggttacaac ccaatctgcg ttgggatccc ccgctccatc cccaagtgc ctaactacgt 240
 ggtggatgaa cctaaggagg aggcgacggc gcaggggcat gacctcaggc ggttcaggta 300
 cgggtgcgcg gggtactcca tgttcgtgga caacagggac ggccaggggtg gtgagagcga 360
 gggcaagacg ttgttgccat attgcanggg cctcgagtta ttggtggaca gcaga 415

<210> 6263
 <211> 246
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-009-Q1-E1-H12

<400> 6263

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 acccccgggt tccggctccc cggccacca aggtgcccct agtatcgccc gcgtgccaaa 120
 ggggaattca ttcaagggtt gccctctact acccgtcagt gctcaagtcc cgcggttaca 180
 acccaatctg cgttgggatc ctccagtcca tcccccaagt tctcactac ttggctggat 240
 gaaccc 246

<210> 6264
 <211> 447
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-009-Q1-E1-H2

<400> 6264

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agcgaaagct cccctaacct tctccgcgca tccgatcgca aggaagaaga gggagatgag 120

ctactacggg cagcagcccc ccgtcggcgt cccgcgcgag caaggctacc cgggcaagga 180

cggctacccg ccagcgggggt acccgccggc cggctacccc ccgcccgggc agggctaccc 240

tccgcagggc taccgcgcgc agtacgcgca gccgcctcca cagcagcagc agagcagcgg 300

gccttccttc atggagggat gcttggtctg cctctgctgc tgctgcctcc tggacgcctg 360

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ctttctatgc gagggagata gatagag 447

<210> 6265

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-H3

<400> 6265

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aactttattg tcagtgcag ggttcagct gcaagaatac gtggggaagc tatgaatgca 120

gctgtggtga tgacaatatg ctatacatga gagagcatga cacttgcac agcaaagagg 180

gaactgccac tactgttggc tggagcttcc tctgggttat tttctttgga cttgtttttg 240

ccggggttgg agcatagct gtgtacaaat acaggctgcg gagttacatg gattcagaga 300

tccgtgccat catggctcag tacatgcctc tggataacca agaaggagca aaccagcatc 360

aggtcgtgca cgccaatgat atctgaagct gcactccttt tctgaagcag aaataaaagg 420

ggcgtgcaac atttc 435

<210> 6266

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-H5

<400> 6266

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 tttctttgca aattctatctt acaattaaat atcacaagct taattgatta gttttgcatg 120
 tcgggacatc ttaaatacgaa taagttgttg ttttgttact acaatgagac cttgattttt 180
 acaggtgaga gcaagagctg cggacctcaa tttgtcacct acttctgata tcaacttatt 240
 ggagagccgt gatatccaca tacattttcc tgctgggtgt gtgccaaagg atggcccttc 300
 tgcaggtgtg acattggtaa cggcactagt gtcgcttttt agtaacagaa aagtgaagc 360
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 taaagac 427

<210> 6267
 <211> 430
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-H7
 <400> 6267

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 tcaccaattg agcactcatg ttccccaaga tggagtgttt attaggagat tcggctctga 180
 ggtgtcttct tcagagcaaa tgaaccttat taagcaactc agacaaagaa cgagtgtctc 240
 aatcaaagat gtcaaggcct ctctagttac ctgcaactgg gatattgagg ctgcacagaa 300
 ggacctaaag aagagaggtg ttgctcttgc tgccaaaaag tcttcacgca ctgctgctga 360
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 aactgatttc 430

<210> 6268
 <211> 420
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-F1
 <400> 6268

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gaagggttgcc aaggctgtga agtctggggc agccaagaag aagaccaaga agatccgcac 180
gtctgtgaca tttcacccgc ccacgaccct gaagaaggct agggacccca agtaccacag 240
aatcagcact accggaagga acaagcttga tcagtaccaa attctcaagt acccccttac 300
cacagaatca gcgatgaaga agattgaaga taacaacact ctgggtcttca ttgttgacct 360
caaggcagac aagaagaaga taaggctgcc gtcaagaaga tgtatgacat ccaggcaaag 420

<210> 6269

<211> 271

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-F11

<400> 6269

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cgtccgattg ggactaaatt aacaatatta agggtaattt gggaaaccca ttttccctg 120
ggattcctaa tttccaaagg aaaatgaact aattttcttg ggaaaatgaa attcccttg 180
gaaaaatgtg gtttccaaac taacctaacc cttagagtta atttgtcaac tctatttttc 240
taaggaaatt cctctcataa ggcttggttt c 271

<210> 6270

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-F12

<400> 6270

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ttgcaaactt atctgctgtt taaattgtag accatataag ttgctatcct atctgctgac 180
gaagtccgtc atgcattggg ctagcttcca tgttcatttt gatccttttc aagcatcatt 240
tgtaattctt aaagggtgaa cctatgctgt gattttttat ttcaaagta tagtgatcta 300
ttagcagttt gatttcatgt gattcatctt tctaagtgtc ttgatagtga ttttctcgat 360

gaaataattg gttcatgatg tttttgggtca tatccaggta gctgctaattg gagat 415

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<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-F3

<400> 6271

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ctctaaaaag gattggtaat gacatcaagg caacgtcagt gttcactgtg cacaatcatc 180
gggaatactc tcgtatccag aaaacagggg atgaggattg cttctgaagg tctgaagcac 240
agaatctttg aagtttgcct aactgatctt catggcgacg acgataaagc ttacacgaaa 300
atcatgttcc atgctgaaga tgtgcaa 327

<210> 6272

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-F5

<400> 6272

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tgttgaaaaa aatgctaact atatataatt gatctaacat gcaactatca tatacctttt 180
catgacatgt cacacctgtg acatagtaat tcatgttcgc gtactcgcct atacacattt 240
ctcttttgggt tatgtcacat ttaagaacta aaaactttac tcatgtcaca ttcaaacaaa 300
aacattgcaa ggaagaatta tgcaagtgtc atgttgcaaa aaaagggttat aaggaagtga 360
catattctga caagaagtaa taggaaatca cgttagaata ctatatcact tacatg 416

<210> 6273

<211> 447

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-F6

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gaccaagata ttttccctcc ttatgctcct tgctctttct gcatgtgttg ctaacgcgac 120
aattttccct caatgctcac aagctcctat agcttccctt cttcccccat accttccatc 180
aatgatagct tcagtatgtg aaaaccacgc tcttcaaccc tataggctcc aacaagcaat 240
cgcagcaagc aacatacctt tatcaccctt gtttcaacaa tcgccagccc tatctttggt 300
gcagtcattg gtacaaacca tcagggcaca gcagctgcag caactcgtgc tacctgtgat 360
caaccaagta gctctggcaa acctttctcc ctactctcag caacaacaat ttcttccatt 420
caaccaactg tctacattga accgtgc 447

<210> 6274

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-F7

<400> 6274

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ggttccacgg cctccggggc tacgccgcgc ccaggctccgc ggtggcagcg ctgccgtccg 180
tgaggggtggg caggaagagg tcgtcgtcgc agggcatccg ctgcgactac atcggctccg 240
ccaccaacct gatcatggtg acgacgacga cgctgatgct gttcgcgggg cggttcgggc 300
tggcgccgtc cgcgaaccgc aaggcgacgg cggggctgaa gctggaggcg cgcgactccg 360
gcctgcagac gggtgacccc gccgggttca ccctcgccga cacgctggcc tgcggcgccg 420
tcggccacat cctc 434

<210> 6275

<211> 270

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-F9

<400> 6275

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atcacaaagc tttgatttgt ttacattaaa tgtcgactcc ggcgatcaat agaggtgctt 120

gaaatggcgc cggccttggt ctgtgatggc tccgaaattc tatgcgatgt ctgagaacaa 180

ccttcattgt gtgttcctgg agctctcatg cacacagccc aacacgctgc ttgtcacgga 240

cctgggcata aatgggtgtgc caacgttcaa 270

<210> 6276

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-G1

<400> 6276

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gctcccggga ctggctccgc cctcaggccg gtggcagtcg ccggcggcct ccgcggctac 180

aacaccggcg ctccgctccg acgctacgag ggggccgagt cggaagacga tagcgtccgc 240

gagtacgatg gggggcacgg cggccgggac tacgctgtgc ccagcctgtt ctcagatatt 300

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ttggcggtgg cggcgccagg tcgtgcggtg c 391

<210> 6277

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-E8

<400> 6277

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tttacatggc caagttggct gagcaggctg aaaggtatga ggagatgggt gagtatatgg 120

agaaggtggc taagactgta gatgtggaag agctcactgt tgaggagcgt aaccttctgt 180

ctgttgcata caagaatgtg attggggctc gccgcgcttc atggcgcatg gttttctcca 240

ttgaacaaaa ggaggagtcc cgtaagaacg aagagcatgt gaaccttatc aaggaatatc 300
 gtggcaagat cgaggctgaa ctgagcaata tctgtgatgg aatcttgaag ctgcttgact 360
 cccacctagt gccttcatct actgctgctg aatcaaaggt cttctacctc aagatgaatg 420
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<210> 6278
 <211> 402
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-D5
 <400> 6278

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 ctcgcccata cggcgccgcc accgcacccc gccaacggcg ccagcagcct gtggcgcggc 180
 ggtggcgccg cgctagctcc tcctcctgct cgcttcgctg ccaagaggag gacgctccgg 240
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 gagccggcgg tgccgcggtc tgtgccggtg cgcgtcgcct acgagctgca acaggccggc 360
 caccgctacc tcgacgtcag aacggagggc gagtttagcg cc 402

<210> 6279
 <211> 402
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-009-Q1-E1-E10
 <400> 6279

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 cggacttcgg ccgcctcgag attgagctgg ccgaggtcga aatgcccggc ctcatggcgt 180
 gccgcgccga gttcggcccc tcgaagccct tcgctggcgc taggatctcg gggctctctc 240
 acatgaccat ccagaccgcc gtcctcatcg agaccctcac cgcgctcggc gccgaggtcc 300
 gctggtgctc ctgcaacatc ttctccacgc aggaccacgc cgccgccgcc atcgcgcgcg 360

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402

<210> 6280

<211> 392

<212> DNA

<213> Zea mays

<223> unsure at all n locations

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<400> 6280

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tatgaaggac agaatagcag tatagtggga aacagcaagc ctcacacctt ggtttaggaa 180

cttattttaag gattcgaggt tcttggtgca tgtactgacg gacagatcat ccacagtaac 240

tttaatacat tgatgtgctt gttcccaggc agaggaaggg catgtcgagc ttctgggcaa 300

tcttctgtat gctgcaaagg ttgtagcaga gcaggaaggg cttgctgatg gcttcagaat 360

tgatcatggac gatgggccca gangatctca at 392

<210> 6281

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<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-E2

<400> 6281

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agttgtcttc tgtgcattgt tttcttatcc caggtcaggt actggtctga atttaatcaa 180

atgagcatcg agctgttaga aaaccaaggc accaactcta atagattcac catctggaaa 240

gcgagggcag ttatcatgcc ttgtgaagat ggtttgttgg gattgctgatt ccctttatgc 300

gtcctatattt ttttatttgt catcttctgt tgtatcatcc tttctttcaa ctatagtttc 360

atgtggtaca tgatgccttt tgttaccttc gccacgtac tgctcacgaa tagca 415

<210> 6282

<211> 443
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-E3

<400> 6282

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tcatgatggc caagtgahta aagcctgcgg taacgggtata gtaccccgcg ggaattgaag 240
gaggaaacca aaccgtgcat cgcataattag aaaggcagtg caggtcttgt ttccttcgtc 300
ttcccatga agaaaccgta ctagctgtag ctgctgaacg tttgagtccc cctgctgcca 360
cccttatctc catttggtgc atcgaaactc cttgcttcac ctgctgtgtg aatctgtacg 420
gctttgcatg ttctggacac tga 443
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<210> 6283
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-E5

<400> 6283

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taaatacaac ttgggtatcc accttgatgg ctcaacattt actagctgct gcagaccgtt 180
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atacagtggc aaatactttg gcactggctg aacagcacca ctgttatcag ctaaaaaactg 300
tttgcttgaa atttgtagct ttgcctgaaa atttgaaagc tgtcatgcaa accgatgggt 360
ttgattattt gcaacaaagc tgcccatccc tctgaccga gcttctcgag tatg 414
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<210> 6284
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 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-E7

<400> 6284

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tgcggggcta cgggccagcg tcgccgtcgt cgtcgtcgtc gtcgggtggcg ctgcctcggc 180
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tggaggagga cgaggggctg tcggggaccg tgttcggccg aggggaggac catgaggtgt 360
cggagaaggt cggggaggag accgtggagc ggtggatgcg ggagtcga 408

<210> 6285

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-C2

<400> 6285

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tcattctgaa acccggttc gacttcgacg aaaaaatcct cggcttcac aacggctaca 300
agcgcacctt taatctcgt tgcattgacc acagacgcac accggagcat ccggcgagga 360
gctgcacgct tgaaaccgac ga 382

<210> 6286

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-C5

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gatggtagcg atgaaaaaat gtgtgaaaac tgggagtgca attttgatga attgaaatgc 120
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 aatggaacag acgaagaaaa ctgttcagaa acatgcccga accctgatga tttcttctgc 240
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 ggaaaagacg aagccgattg taaagatacg taagactgcg acgattccct ttaggtcgtt 360
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<210> 6287

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-D12

<400> 6287

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 attctggcaa agtgactgaa accaaagccg acacagcccc agctgagtag ttggtgtggt 360
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<210> 6288

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-A5

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 acttcgagga aaaccatgtc gctactggat ttggaaatca tatggcaatc ccgatactcc 180
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 caagtgaagg atcaaccatc taccacccat attccttgaa gacctactgg ggcttcactc 360
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<210> 6289

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-B1

<400> 6289

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 cttcaccaag agaccaccgc cctaccccct cggcgggcgcc ggcgcgaggc tccgggccgt 180
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<210> 6290

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-B2

<400> 6290

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 atgtgcctt cgtcctcgct cttctcccta accagatga tagggagtca gccgtgcct 240
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ctcttctcct taaccggac gagaagaagt cagtccatgt cggatctgaa tgat 414

<210> 6291

<211> 455

<212> DNA

<213> Zea mays

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tagtcagggtt gacaaatata tgaaaagggtt caaaaatgat ttacaaagaa atggaatgcc 120

taacattgaa aaaacattgc aaaaaggatt ccagacttgg ttcaaacca atatcctaag 180

aatgaagaat ataaatcaag aagacgctga tgatgatcta ttttccttgg cttgtggtcc 240

tgatttcaga gttcgaaaat actcctcacg catagtgaat ggtgtgcggt ttaacactag 300

tgaccgtgac aagcatcgaa agacacaaaa tagtggagta atgacacaag gtactcataa 360

cgggtcaagaa attgattttt ttttggaaacc ttaagagaga tcattcagtt agagcataac 420

cttgatgaga gatcagtagt tttgtttaaa tgtga 455

<210> 6292

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-B5

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tggcgacatg gaggaggcta gaaagctgtt ccgaaaaatg gcacagaaag gggctacgcc 120

cactgttgtg acctacagtg ttatgattca tgggtacgcc acaaattgga ggatccatga 180

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cgaatagatg acgcacaggg gaacggaacc taatgtcgtg gcctatacag ctctgatatc 360

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agctggattg agtccacatg ac 442

<210> 6293
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-B6

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gtgggggttc tcaagagggc ggggaggacg ggaggaagga cacggacctc gccacgctcg 360
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<210> 6294
<211> 397
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-B7

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cataatatta ttattagtag taattccgcy gtcaggccag cgttcgcttg tcacgcttgg 180
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tgatcgatcg atcgatcgag gatggaaggc gcgccggctg ggtggccgga gccggtggtg 360
aggggtgcagt cgctgtcgga gagcggcgcy ggcacga 397

<210> 6295
<211> 443
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-G8

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aagaaaccac cttgctggca aattcgtatg gaagaaatga aggaaccaag ggcatacatc 180

atggaagaaa gctgatggac aatagtattg gttcaaaccg tgagtattca atcgatgata 240

tgtctcatcc aaaggcacca cataactgagc tcaagcaacc ctcatactta gtccttggtt 300

gtcgaagcaa ccctctcaag caaccctcaa acttagctcc tgggtgcatt ccctaaagtt 360

catgcataca tatatagcct tccactcatc atatgctggg atccgatcta tatatagaca 420

catatgatat gttgcatatc gcc 443

<210> 6296

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-H10

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caagcacaac tccaaggagg attgctggct catcatcggc ggcaagggtg atgatgtgac 120

gaagtttttg gtagaccacc caggagggtga tgatgttctg ttgtcctcaa ctggcaagga 180

tgcgactgat gatttcgagg atgtcgggtca cagcaacact gcccgcgaga tgatggatga 240

gtacttggtg ggtgaaatcg acgcgtcgac gatcccttcc aggacgaagt atgtcccccc 300

gaaacaaccg cactacaacc aggacaagac tcccagagtt gtcatacaaga tcttccagtt 360

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<210> 6297

<211> 148

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-H12

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aggacaccat aaaaaatgaa tgtgaaaaaa aaaattcatc aatttctcaa tacaaaaata 120
aacaaaaaat aggggggggc cccctag 148

<210> 6298

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-H2

<400> 6298

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ggcgttggtg ctacaaattc acttgctctc tgcctccaaa ttatatatat tacacacact 180
gcatgaaaca agaacacagc tgtttgatc ctcttcacta taaccttttg aacactctga 240
aatctaattg aatcaaatat agactttctc tgccatctgc tgatcaagt accagcaggg 300
agagcaattt agaccttttt tttttgccga aatgactttt atgtagtagg ctcacatcaa 360
tttctagtta cttggtc 377

<210> 6299

<211> 329

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-H4

<400> 6299

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gttccccgtg tcgacttctc aaacctggac ggcgctgaga gggctgaaac cctggcgag 180
atcgccaatg gctgcgagga gtggggattc ttccagctcg tgaaccacgg catccccgtg 240
gagctgctcg agcgcgtcaa gaaggtgtgc tccgactgct accgcctccg ggaggccggg 300
ttcaaggcgt cggagccggg gcgcacgct 329

<210> 6300
<211> 417
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-008-Q1-E1-H6

<400> 6300

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tgggcggcgc cttctccagc aagttcatcc acgagtacca cgagaggacg aggcaggagc 180
acgacgagct ggctcgacagg tccgacgagg cgggtggagag cgtggagaac cccgggtggt 240
gcatagccaa ggccgtggcg ctgctgctgc tgggctccgc cgccgccgcc gcgttcgccg 300
accgcctcgt ggacgccgtc cacggcttct ccaacgccac gcgcatcccc tcctttcttca 360
tctccttcat cgccctcneg ctgcgccacca actccagcca ggccgtctcc cgcattca 417

<210> 6301
<211> 285
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-H8

<400> 6301

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ttctcagttc attacataga atgcaaaaag ttagtttctg ataaggggga tccgttcgtg 120
cgggttctaa gtattaggct ggtgtgtacg cgtcttcttc gtgctcctac acgtcaccat 180
gtctcaattc cagtggcggc cgtttattag ggtggccctt ggaacacccc tgggcgctgc 240
caatttactg ccttagcagc acagcaccct tgctccagtt gcggt 285

<210> 6302
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-A10

<400> 6302

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 aattgtggga aatggattgc atcaattaat ctatgagttt tactatattg tgctctaact 120
 aaccgagcat ctttgtaaaa cttatattat gtagtacctc acctactcaa attatgtggt 180
 gacttggtgc acttgcagct caattaagaa cgttactgat ttctagggct acacttatgt 240
 ttcgttaact gctaaaaatg ttgctgattt cataagcaac attgggaaga actatgttgc 300
 cattatttca agtctagatt ctgggaagag gacggtaatt gatgcatcca gcggggaaag 360
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 cgcacgccca ctctcgctag ctct 443

<210> 6303
 <211> 365
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-A11
 <400> 6303

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 atgaaaaatg caattgcaag gtctgagtaa ttaattaatt aattgtaacg gtcaaccttg 180
 ggcgttagta attgtcagtc gtctgtctg acgcagacag atagtaactc cttaccacta 240
 gctagcagat cgtttgaca cagctgcttg ttgtacgtgc tacttggtga ttctttgaat 300
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 aacca 365

<210> 6304
 <211> 304
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-008-Q1-E1-F4
 <400> 6304

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gatgaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaagacggct 180
gcaaaggaat aagatttaag tatacgtgca attaaagtca aagtaatgtt acaacgagag 240
aagcaacaaa tttaaaataa cgtggagatc aatttacaac gatcgcaaaa gcaaaaactg 300
taac 304

<210> 6305
<211> 371
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-008-Q1-E1-F5
<400> 6305

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gtcgtggtgc cagggcctgg acggcctggc gtcccgcgag gccgcctact accagcaggg 180
cgcgcgggttc gccaaagtggc gcaccgtcgt cagcatccct aacggcccct ccgagctcgc 240
cgtcaaggag gccgcgtggg ggctcgcacg ctacgccgcc atctcacagg acaacggggct 300
tgtgccgac gtggagccgg agatcctgct ggacggcgag cacggcatcg agcgcacgtt 360
cgaggtggcg c 371

<210> 6306
<211> 369
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-008-Q1-E1-F7
<400> 6306

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gttgagcttg gatgccttgc ctgcttccat ggaaaccaga gttttgtttg agtattatct 120
gttggtcttg gctgaagagt cataatttag cgctctgtgt gttacaccag agttaagtct 180
gcctgaactt atgtggcatt tgtttgagtt tctaccttcg tgccctgttt tctaattgtac 240
cgtggttggt aaccgggtcaa tgtgatctga aataaaacat tgcgtgccaa gtttgtgtta 300
caagtttgat gcactgggaa tgccaggcaa ctaatgtggg aataaacatt ttgccaatct 360

tttttttttc

369

<210> 6307

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-G2

<400> 6307

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agggagggga aaagagagat ggtggaggca tcgccggagt ccggcgccgc gggcgaccgg 120
aagtgcctct agtacggcgg cggtgccgaa ggggaagtca tgcaagggct gcctctacta 180
ctcgtcagtg ctcaagtccc ggggttataa cccaatctgc gttgggatcc cccgctccat 240
ccccaagtt cctaactacg tggatgatga acctaaggag gaggcgacgg cgcaggggca 300
tgacctcagg cggttcaggt acgggtgcgc gggttactcc atgttcgtgg acaacaggga 360
cggccaaggt ggtgagagcg agggcaagac gttgttgcca tattgcaggg gcctcgagtt 420
attggtggac 430

<210> 6308

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-E12

<400> 6308

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ctcttctgcg agccgttccc ggtcagctcg tgggtgctcc cgggcagctt cccgcagaac 120
aatccccaca agctccacat cggcgcgccg gagagctacg cgaacatgct caagaacaac 180
atcgtccgca acgacgacgg ccccggcgcg ccggcgctgt cgtcgtgccc tccgtacgtc 240
tacctccacc tggagcagtt ccagctgaag ctgtccgaca acgtcttctg cgacgaggac 300
caggtcacgc tcagcaagtt caactggatg ctgtcaagt ccgacagcta cttcgccccg 360
gcgctgttcc tgacgcccac g 381

<210> 6309
 <211> 403
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-E4

<400> 6309

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tgttgaatta gtcactgtca gggagggatc tagttgtcag ttgtttgtat taaagctgct  180
ggcactttcc ttgcagggtt tctgtagaat aaatgggaga aggtacaat tttcaacttt  240
atattgtttc ttgtggatca attgactgtt gcacctttgc aacatcagag tccgtcattg  300
tagaattgtg cttttctgtt accttcagaa ttagatgtta ttatacctgc catgtgtaaa  360
catcagcatg gctgcgtgtt cctcctgggg cctctttgtc atg                               403
  
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<210> 6310
 <211> 426
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-008-Q1-E1-E5

<400> 6310

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aaagggcctt gcttacctgc actccatttt taaagttcac agagatatta aggggggcaa  180
catccttcta actgagcaag gcgaggtgaa gttgggtgat tttggtgtan ctgcccagct  240
gacaagaacc atgtcaaagc gcaacacgtt cattgggtact ccacattgga tggcaccaga  300
ggtcattcan gaaagtcgtt atgatggaaa ggtanacgtt tgggcattag gtgtatctgc  360
aatcgagatg gcagagggca tggccacaag atccactgtg catccaatga gagttatctt  420
catgat                                           426
  
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<210> 6311
 <211> 321
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-B9

<400> 6311

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cgggcatcct cgaggtctgc gacgtgccgc tcgtgtccgt cgacttcagg tgcaccgacg 120

tctcctccac catctacgcy tccctcacca tggcatggg cgacgacatg gtcaagggtca 180

tctcctgggt cgacaactag tggggctaca cccagagggt cgtccacctc actgacatct 240

gcgccaacac gtggaagtga agcgttgcat tgtactcgca ctttgtacct cctcaccccc 300

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<211> 428

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-008-Q1-E1-C12

<400> 6312

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gttcctgatg caacggtgca tcctgttaat tcaacatccg atgttattga gttaatgaga 120

ataggacatg caaacagagc agtgggttcg acaatgttga atgaaagaag cagcagatct 180

cacagtattg ttacaatata cattcgaggt gtagatttga naacaggagc tactctgtgt 240

ggtgcactac atcttgttga tcttgcctgg agtgagagag tggaccgatc ttctgttaca 300

ggcaatagac ttaaagaagc acaacacata aacaaatctt tgtccgctct tggagacgtc 360

atattttctc taccgcagaa gaatgctcat gtaccctacc ggaacagcaa acttacacaa 420

gtcctaca 428

<210> 6313

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<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-D1

<400> 6313

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 ttagattctc gttgacaaga agactagaac cgaacctgac catgtcgtg atccgccgca 180
 gcaacgtgtt cgatcccttc tccctcgacc tctgggaccc ctttgagggc ttcccccttcg 240
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 ccttcgctgg cgcgcggtac gactggaagg agactccaga ggcgcacgtg ttcaaggccg 360
 acgtaccggg gctgaagaag gaggaggtca aggtggaagt cgaggacggc aacgtccttc 420
 agatcagcgg cgagcgcaac aaggagc 447

<210> 6314
 <211> 400
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-008-Q1-E1-D10

 <400> 6314

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 atgagcttga ctcaattgct actcagagag gaagcagtgt gggtgatgct ggaggtgcgg 120
 ctgatagagt gcttaatcag ctactgacag aaatggatgg catgaatgcc aagaaaactg 180
 tgtttattat tggagctaca aacaggcctg acatcattga ccctgctctg ctgaggccag 240
 ggcgtcttga ccagctgac tacattccac tgccctgatga gcagtctagg ctccagatct 300
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 agtacactca agggtcagtg gagcagatat cacagaaatt 400

<210> 6315
 <211> 377
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-008-Q1-E1-B6

 <400> 6315

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cgctagcaag agcagtcgca agcttcgccg gagaaccctg ggaggacga aggagacgac 180
tggttggtcca aatccaaaac cattattggc cgtttctcgt tagcgaggaa agggaaagcg 240
ttgcttggtc aggtgggttg ggtaggtaga ctgtagcttg tgaatatgat ctgtcctgtg 300
tataatgagg gtaatcggat tcttttttgg caacgagtct tgtttttttt tttaatcgtg 360
agctgctcgg tttctgc 377

<210> 6316
<211> 411
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-008-Q1-E1-A11

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ccatgtgcta ctgcatcgtc ccgcacaagc tggaagaaaa aaacaccagg aagatcagga 120
gggcctccgc gagccagtc cgcggctcgt ggtcccgatc ggtecgactcg gacgaggaga 180
tacttaacag cgagtacaag acgaagatgt acgcgctgta gcctgtagga tggatagcaa 240
gtgtaacatg acggattctt ttgtacatac cagtgccttg tttegccaga ggctgctcca 300
tggcattcgg ctcgggatgc anaggctgcg gcaccacatc agtcttcaac caaaggactg 360
aaggcccttc ctgtgaaacc aagttcaggt caettgaccg gtgtgcctgt t 411

<210> 6317
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-A3

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aaaagagtga ttggttgaaa agaaagagaa atagaataat gagaatcata tggatttaca 180
caaacctcta atgattagaa actaaaaacg agatctcgaa gtaattcgaa cgatttcgat 240

tatcatttat ttgtacttat tagttacttc taccogatag agcttagaag ttggaagtaa 300
 taatttcttg gttgattgta tccttaacca tttctttttt tttgacacga ggaactcatc 360
 atgaatccac taattgctgc tgcttccgtt attgctgctg gattgcccgt agggcttgct 420
 tctattgggc ccggattt 438

<210> 6318

<211> 322

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-A4

<400> 6318

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 aataaccgag caggatttga gggatcagtt ttatgcccac ggtgagatcg agtccataag 180
 gatgggtactt caacgtgcaa tcgcatttgt gacgtatact acaagagaag gcgcagagaa 240
 ggctgcagaa gagcttgcta ataagctagt catcaagggc gtgcgcctga agctgatgtg 300
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<210> 6319

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-A5

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 actcccgcgc cgttgggtga tgcggcccca gaggcgcccg cggacgcccc ggcgggcct 180
 gctgccgacg cgaagccggc caaggccaag aaggccaccg caccgaagaa gcgcgccagc 240
 ccgaccacc ctccgtacgc cgagatggtc tcggaggcga tcacgtcact caaggagagg 300
 acgggggtcca gcagctatgc gattgccaag ttcgtggagg acaagcacia ggacaagctc 360
 ccggccaact tccgcaagct tctgaacgtt cagctcaag 399

<210> 6320
 <211> 168
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-008-Q1-E1-A8

 <400> 6320

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 aaaaaaggaa tgaagaacaa ataagttata atgttgata gtcttgaagg tggttcgttat 120
 aggcccttcta ggttggttcc attggttcgt ttttttggtt tgtctttt 168

<210> 6321
 <211> 436
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-008-Q1-E1-B1

 <400> 6321

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 ttccagtgcc gaagtcacaa cctcaccga agagaccttc tccgacaaga taaaggagaa 180
 ggacacggtg tggtttgtgc agttctgct cccctggtgt aaacactgca agaaccttgg 240
 aacactatgg gaggacctgg gaaaggttat ggaaggtgct gatgaaattg agattgggca 300
 agttgactgt ggtgtcagca aaccagtatg ctcaaaggct gatatacact cctacccaac 360
 attcaaggtg ttttatgaag gcgaagaagt agtaaaatat aaaggaccta ggaatgtgga 420
 atcgtgaag aacttc 436

<210> 6322
 <211> 359
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-008-Q1-E1-B11

 <400> 6322

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 ttgtgcattg aaggagcaag agccatggcg gaacagcagc agccgcagga gatggacggt 180
 gaccgtaccg gtggcctcga actgcctcca gggttccgct tccacccgag cgactttgag 240
 attgtcagcc actacctcaa gaataagggtg cacgacaggg actacagctg catcgccatc 300
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<210> 6323
 <211> 439
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-008-Q1-E1-B2

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 gtgacgaaaa agccttgaca atgagcagca taggcacagg ttatgatctg tctgtcacca 300
 cttctctcc cgatggcgc gtctccagg tcgagtatgg cacgaaggct gtcgacaaca 360
 gcgggaccgt tgttgggatc aagtcanag atggcattgt tctgggtgtc gagaagctgg 420
 taacctcaaa gatgatgct 439

<210> 6324
 <211> 453
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-B3

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 cgaccaacta cgagttcgcg ccagagacgc ggcgcctgac ggtgtacatc ccgtccccct 180

gcgaggtcgg ctaccgcgac ggctccgagc tgcgggttcga cgccacggtg tcggggcacgc 240
 tgggcgaggg ccgcctcacg gaggtggaag ggatcaagac caaggtgctc gtctggggcca 300
 gggtcaccgc cgtcaaggcc gacgcgcgcca aggtccactt caccgctggg atcaagaggt 360
 cgcgagccg ggacgcctac gaggtcgta ggggcggcat caccgtcgac gagttctagc 420
 ttagttttgc tttcgccgct cacatggatg gac 453

<210> 6325

<211> 141

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-B4

<400> 6325

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 aaaaattaaa aatataacaa actaatataa acgttcatta aaaatgttaa aatctttaa 120
 attgacttca aaaaaggggg t 141

<210> 6326

<211> 427

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-007-Q1-E1-G4

<400> 6326

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 tgaggatgcc ctaaatgcaa ccaaggctgc tgttgaggaa ggtattgttg ttggtggagg 180
 atgcaccctt ttgctggcttg cagctaaagt cgatgccatc aaggatacac tggagaacga 240
 tgagcagaag gttggagctg aaatagtaag gagggccctg agctaccac ttaaattgat 300
 tgctaaaaat gccggtgtca atggcagcgt cgctactgag aangtccttt ctaacgataa 360
 cttcaagtat gggtacaatg ctgctactgg acagtacgag gacttgatgg ctgctggtat 420
 cattgat 427

<210> 6327
 <211> 210
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-007-Q1-E1-G8

 <400> 6327

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 gggatgattc agcggtaaag gattaggctg atactgtcga tgaagatgta tctagagcag 120
 atctcgtgat aaatgtggtg agactgatgt ctgccacaac accaactt tcttacggga 180
 catagtcgcg tttcatgaga tgcagtggat 210

<210> 6328
 <211> 277
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-007-Q1-E1-H12

 <400> 6328

 acccacgcgt ccggaagggg aagaagaagg ccaacaatag cgtggagacc tacaaaatct 60
 acatcttcaa ggtcctgaag catgtgcacc ccgacatcgg catctcctcc aaggccatgt 120
 ccatcatgaa ctcttcatc aacgacatat tcgagaagct cgccggcgat gccgccaagc 180
 tcgcgcggta caacatgaat ccagcatca tctctcgga gatccagacc tccgtgcgcc 240
 tcgtctctcc aggagagctc gccaaacatg ccgtctc 277

<210> 6329
 <211> 349
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-007-Q1-E1-H2

 <400> 6329

 ccgacccgtg ggggagggcgt ggccgccggc gagcttcggg cggtagagga cgcgggtgga 60
 gctgccggag aacgtggacg tggagaggat cgccgcataa gtgaaggacg gagtgctgta 120
 gctcaccatc cccaagctgt cggcgggggc caaggctcgtc aacatccaag tgcattgatg 180
 ctgtgggtca gattcatcag gacgattagc acctgctgcc gtgcttttcg gagcttcaag 240

aatctggatg cttgggacga gagcgatata gatctagcta ccagtcttct tttcactctt 300
ctttttctgt ttcgttccgc gattttgttt gcaatgtcac acatggtaa 349

<210> 6330
<211> 346
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-007-Q1-E1-H3
<400> 6330

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ctcggccgca ataactcgcc acatccatgc tcgtcggtcc tgtgctgctg cttccttgtc 120
cctccgccgc tcgggcttcc tgnngcgcgt cgtgctggcc gcggtgccag tggccgtgga 180
cgccacccgg cgccgccgcg tctccgtgtc ggtgcggatg gcctgggacg gtccgctctc 240
gtcgggtgcgc ctcatcatgc agagcaggaa cgccaagctg agcgagaagc tcaaggagca 300
catcgaggac aaggtgggtc gggcgggtgc cangcactgc cacctg 346

<210> 6331
<211> 416
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-007-Q1-E1-H7
<400> 6331

acggacgcgt gggcgggaga acatgtacga ggcgatgtcg ccgcgccggg cgctcctcgc 60
catcctcttc gccgtcgccc tcgctccgc ttcctcgga cccagcccc cgccgtgcag 120
ccgctcgtgc gcggccctca actgcgactc cctcgggata cgctacggca agtactgcgg 180
cgtgggctgg aacggctgcg acggcgagga gccctgcgac gacctcgacg cctgctgccg 240
cgaccacgac cgctgcgtca agaggaaagg tatgatgagc gttgaatgcc atgagaaatt 300
caagaactgg catgaggaaa gtgaaaaagg caggcaaggt tggcttctcc aagaaatgcc 360
cgtacgagat ggctatggct acaatgactc aggggatgga tatggccatc atcctt 416

<210> 6332

<211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-007-Q1-E1-G12

 <400> 6332

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 tgctctactt ctgcctgatg gcccttgctg tagctgctat ggtctgtgtc atgtacacca 120
 cctcggcaca agcaggaagg agtggctaca actcgtacga acctgatgga aggggtggat 180
 acaactctgt tcccatcaac ggcggtggca gcccctagct aggcggtgga tccgagcctg 240
 tatcagaaat cgaaataata taagactgtc ttcaacggat cacactgccg ctccccacg 300
 ctaaatttgg gggctacagt gcacacgcta gccgattaac ggctcacgct accaggcgct 360
 ctacgcggat gtgcccccta gccagcttct ctctccccct cgttctgtgg tgctctcttc 420
 aacct 425

<210> 6333
 <211> 410
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-007-Q1-E1-E7

 <400> 6333

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 cttctcgagc tcgttccgta gcaactgcctc attctccaag tccatcatgg actcatccat 120
 ggatttcaat agcgctcgct tctctgacat cgctggcagc agcgctcgct tcacgggcgt 180
 tcctggtagc agctctcgct tcgcgggcgt tcctggcagc agcgctcgct tctcgggcat 240
 tgctggcgcc agattggaca acgacgagga gagtgaaacc acggagaggc cactggtgct 300
 tcgtaataaa ccgcctaggt ggcacgaaca gctgcagtgt tggtgcctca acttccgtgg 360
 ccgtgtgaca attgcctcgg tgaagaactt ccagctgaat gccgccgcta 410

<210> 6334
 <211> 394
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-E9

<400> 6334

cccacgcgtc cggcgacatg gagtacagaa agaggggtgga tgcgttagtg tttttctcgt 60
tactttctct cggatacttt gctgctcatg cacatgggaa gggatcatgcc atagatgatg 120
tcgggtgttc tactccagct aaagaaggaa ttatgcaagg aaacggagca tgatgcattg 180
tagggtttcc tccatgcaaa gataacaagt gctactgctg cattgggggg cgaactcatg 240
ttcgctactc tacgctgggt gagtgtagtc atgctgctt ctaaacaaaa attaagatca 300
ctgttattat atacattgta ctggtaggta atgctattaa taatatatgg taatttttagt 360
tttggтата aaaaaaacca aataaaacaa ctaa 394

<210> 6335

<211> 408

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-007-Q1-E1-F10

<400> 6335

cccacgcgtc cgcccacgcg tccgcagggg ctgtacatgg gcaacggcgg cggcgccaac 60
gtcgtggcgc ccggtacac caagggcgac ggctaggcg ccgagatcgt cggcaccttc 120
atcctcgtct acaccgtctt ctccgccacc gacgccaaga ggaacgccag ggactcccat 180
gtgccgatcc tcgcccctct tccaatcggg tttgccgtgt tcctcgtcca cctggccacc 240
atccctatca ccggcacccg catcaacccc gcgcggagcc ttggcgccgc cgtaatttac 300
aaccagcacc atgcgtgggc tgaccactgg atcttctggg tcggcccctt catcggcgct 360
gcgctggctg ccatctacca ccaggtgatc atcanggcga tcccgttc 408

<210> 6336

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-G1

<400> 6336

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cgagatgcag ctcaaggtcg gttggggccc ctggttgaag gaacaggcca actacctaag 120
 acacaatcgg atcctctgct caaatctaga ttcccttact tcgagcaacc acccgctgct 180
 ccaggatgcc tcagccacca acaactcgcc caccaagtac tcgacagaat gtttcagcca 240
 tgacatcgtc ctggttgagga ctatcagtgc tgcacccaca agcgaagacc gcgcgctgca 300
 gcagaggcgc cagcagtgcc tcgtcacgcy gcccagattg gcgaggattg gcggacggaa 360
 ctacatcatg ctcgagcatc accccaacag gat 393

<210> 6337
 <211> 423
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-007-Q1-E1-G10
 <400> 6337

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 ctcagcttct gctccttttc ctttcccagc gcatcaggga ggcggcgatt cgcggcggtg 120
 agggcggtccg cggagacgat ggcgacggag aagctgggca tcaaggtgga gcgcaaccgc 180
 cccgagtccc gtctctccga gctcggcgtc cgccagtggc ccaagtgggg gtgcgagaag 240
 agcaagttcc cgtggacctc ctccgccaag gagacgtgct acctgctgca ggggaagggtg 300
 aaggtgtacc ccgaaggcca cggggaggag ttcgtggaga tcggcgcggg agacctgtc 360
 gtcttcccca agggcatgag ctgcacctgg gacgtcgccg aggccgtcga aaagcactac 420
 aac 423

<210> 6338
 <211> 409
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-007-Q1-E1-D10
 <400> 6338

cccacgcgtc cgcccacgcy tccgcggacg cgtgggggtt caagtaacct ggagcaaaag 60
 aattcccaga agttggaaga ttcagatcaa cagtcccatg gcaagggtat gaagaacttc 120
 aatttgaatg agacactgtc agattgtcag gaagatggtc ttgtagaaca agatgggaga 180

tgtgcttcca gttttcagca tgataaagat ggggggtcag tacttgggat ctcttggtc 240
 aaaaaaact tatgtctgct gacccaacag ctgtggagaa gccaggaag atttttggac 300
 attcattggg aactgcaata gagctgaaaa atactaaaga ccagaatgaa ccagctgtga 360
 ctattcggaa tttgtcagat tctgcttcta catctgttgg ctgtgcaat 409

<210> 6339

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-D11

<400> 6339

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 acagaaggac ttcagatgtg aggaagtggg atggtgatag tagcgagttc gaggcattcag 120
 atgaagaatg ggactctggt gatgacaggg gtaatgctct gggcttcgac aatgatagag 180
 gttctactga tgagcaccct cggcgatttg gaagcatgag ggaacaaaag agtagattca 240
 atcgggcaca ggattttgtc cctaggggag gcggtgggtga ggggaagggt ttcaatagaa 300
 gctatggcaa ccagatgct gatgttcaca atagaggcca gggaagacat aggagagata 360
 ataaaagaac atcagatgca aggatgtggg atgataatag tgag 404

<210> 6340

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-D12

<400> 6340

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 gtgggttcaag gttttcattg catgttgact ttttttagc tcccaatgat gttaatgtta 120
 tgttgcatct tgacataaga tcttttttaa aaaaaaaat cgtgcatgtc gtctgtctgt 180
 ttctgtattc ctataaatgt tcttagatct taacatattg cacttcgtgg gaatgatact 240
 gttctaatat atcattttta tgtatttttg catacaagat atacagaaaa atgggtgaag 300
 gtacttttgg tcaagtactg gaatgctggg accgagaaag caaagagatg gtggctatta 360

aaattgttcg ctctgtaaag aaatacagtg atgcagcaat gatagaaatt gatgtcctgc 420

<210> 6341

<211> 422

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-007-Q1-E1-D3

<400> 6341

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gccacaacaa ggtcaaggat ttcttgcaac tgcggttcaa cctgcggctg cggtctcaagc 120

tgcaagtgcg gcaagaagta ccctgacctg aaggagacga gcaccgccgc gcaggccacc 180

gtcgtcctcg gcgtggcccc ggagaagaag gccgcgcccc agttcgtcga ggccgcggcg 240

gagtcggcg aggccgcnc a cggtgcagc tgcggtggca actgcaagtgc cgacccctgc 300

aactgctgat cacatcgatc gacgaccatg gatatgatta ttatctatct agcttggtgt 360

ggtggttgaa caataataag cgaggccgag ctggctgcc a tacataggggt atgtgtggtg 420

tg 422

<210> 6342

<211> 230

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-D4

<400> 6342

acgcgtccga gcgactagag ccaaggcagc acgttcccgg caggagaaga acaacaccgc 60

aggcgccccg gaaatcagtt caggggccgc aaggcgtgga agtgaaaaag cctctgctgc 120

cgctttgcga ttcatctagc cgaatggcca atttttttga ctctttgtat cttcttctgc 180

cagttaatgt ttccatataa taccttgatt ctatgagaat gcttttccat 230

<210> 6343

<211> 183

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-D5

<400> 6343

gacccacagc gtcagcccac gcgtccgccc acgcgtccgc ccacgcgtcc gcggacgctt 60
gggcgggacgc gtgggatggc gccctcgtag accgctagtt cgggccacga cttcagtgtc 120
gacgatgcta tcggcaatga cgtttacctc agcactgtat aacgggaagg ttctttctcat 180
tgt 183

<210> 6344

<211> 426

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-007-Q1-E1-D9

<400> 6344

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tggcggccca ggctctctc tccggccggc agctgctggg ccgccccgtg cagtcggccg 120
tctctaggtc gtcggcgagg aaggcgccct tcgtcgtcag ggccagctcc agccctccaa 180
ccaagcaagg tgccgacagg cagctgtggt tcgcgtccaa gcagtccttc tcctacctcg 240
atggcacgct gcccgggac tatggcttcg acccgctggg cctctcggac ccggagggca 300
ccgggggctt catcgagccc aagtggctgg cctatggcga ggtgatcaac ggccgctacg 360
ccatgctggg cgcggtgggc gccatcgccc cggagatctt cggcangatg ggcatcatcc 420
cccggg 426

<210> 6345

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-E1

<400> 6345

ggtctagaat aacggggccga gccacgcgtc caccacacg tccgccacg cgtccgcca 60
cgcgccgccc cagcggtccg cccacgcgtc cgccaagttt ttgagccttt cagtattctt 120
ggactggaat ctggggcatc tgaatctgat atcaagaaat catataggag gctttctatt 180

cagtaccatc ctgataaaaa tctgatcca gaggtcata agtactttgt tgaatatata 240
tccaaggcat atcaagcatt aactgatcct atatctcgag agaattatga aaaatatggg 300
caccctgatg ggcggcaggg gttgcaaagtg ggcattgctt tgcccaagtt cttactaaat 360
attgatgggtg catctgggtg gataatgctt cttggaatag tcggattttg tatattattg 420
cctttgatga tagctgtta 439

<210> 6346

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-E10

<400> 6346

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gccttgcaat gaggcgcaagg ggactggaga gagcatcaat gagaaggacc gctgcccagg 120
gtgcaagggtg gagaaggctg ttcaagagaa gaagggttctt gaggttcatg ttgagaaggg 180
gatgcaacac aaccagaaga tcaccttccc tgggtgaagct gatgaagcgc ctgatactgt 240
cactggagac attgtattcg tctccagca gaaggatcac tccaaattca aaagaaaggg 300
tgaagatctc ttctatgagc acaccttgct tctgaccgaa gcaactatgtg gggtccaatt 360
tgttcttaca catctggaca acaggcagct tctcatcaaa tc 402

<210> 6347

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-E11

<400> 6347

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caagtgggaa tcaatggaag catgaacca tgcattccatc caatgggttc tgctgacca 120
aaatttggtg gtagtgccac accacagact tccctcata attatgcggc ctttgctcca 180
atgatgcagt gcaactgtaa ccaagatagc tacaggatcat tcaccaacat gtcattccacc 240
ttctccagca tgcttggttc cacgttggtg tcaaaccctg ccatccatgc agccgccagg 300

ctcgcagcat catactggcc agcagctgaa ggtaacactc ctattgatcc gaatcaagaa 360
aaccctgcag atggcgtcca aggaaggaac ataggctctc ctccaagcat gggtttctatt 420
gt 422

<210> 6348
<211> 420
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-007-Q1-E1-E12
<400> 6348

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aaaaaaaaa aatgaatcca atcggaatca ttgaaagctt tgttctctatg catcgaacca 120
attggtttct gtcgatccag tctttggcat taatgccact ccacagactt tccctcatat 180
ttgtgcgggc tttgctcggg gggtgcagtg cgactgtaac cacaatacgt ccaggtcatt 240
caccagggtgc gtcttcatcc ttctcgagca ttcttttttc cacgttggtg ttttcctctg 300
ccatctgtgg aaccgcctgg ctctcatcat cttactggcc atcagggtgaa tgtcccactc 360
ctattgatcc gtatcactat acctgtgcac atggtttcca ccgaacgatt ataagctctc 420

<210> 6349
<211> 308
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-007-Q1-E1-B4
<400> 6349

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aagctcacgg gcacccccaa gtccgccaac ttccgcccct ttctgttcaa cttcagggcc 120
cccaacttct ctccaacaat caaacctcc ccaacaaggg ccatggccaa caacatggtc 180
aaggtcacct cctggtacta caaccattgg ggctaccccc agagggtcgt cgacctcgct 240
gacatctgcc ccaaccggtg aaagtgaacc gttgcattgt aatagcactt tgtaactcct 300
caccctcc 308

<210> 6350
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-007-Q1-E1-B5

 <400> 6350

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 catatggcta catatgcaca tcattgaaga tattttcgtc aattgccgcc aagttttcaa 120
 aggctcagtt aactatgctt ggacaacagt acctacatac cctagcggag ttattggggtt 180
 catgctttgc tccaccgaag ggcctgctgt tgatttccag caccctgttt tcaacatcga 240
 ggaggatgaa cattctacga aatcaaaagg accccttaag ttctacaact cggagatcca 300
 cacggcatca ttctgtttgc cctcttttgc aaagagggta attgagtcaa aggcaagcta 360
 gacgtgagga tacttcacca agtccagtcg attgggttaa gtacctagg cgcaacacaa 420
 aatttgttgt cctgttaaaa 440

<210> 6351
 <211> 385
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-007-Q1-E1-B6

 <400> 6351

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 gttgagaccc ccagcagcga caagaagaag gtacagttca ccaagaacct cgagatgggc 120
 cccactggct cgcccagggt tgacgaaaag aaggaagccg caaagcccgc cgccaaggga 180
 ccccgcaacg tcagcggcgt caccgtcgac gacaagaggg agggtaaggg caaggccgcc 240
 aagaagggcg accgtgtcga gatgcgtac attggcaagc tgatgaacgg caaggtgttc 300
 gactgtaagg catgaatccc aactaacttg agctgtactg acgtgctacc agccaacaag 360
 aagggttaagc ctttcgcctt caagc 385

<210> 6352
 <211> 415
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-B9

<400> 6352

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atgaatcgat gcactggagc ttgatcattg tttgcatgcc tacaaaagag gcagattctg 120
ggccaataat acttcacttg gactctcttg gtcttcactc cagtcaaaag ctttttgaca 180
tagttgagag ggaggatatg gaggcgtctt tcgaaaaata tcaataggga aaagattgag 240
gtgccacgtc agcgtaacga gtatgattgt ggctcttcta tgctttacta tattgacagg 300
tttattcaag atgcgccaga gaggttgaca aaagagggcc ttggcatggt tggacgcaga 360
tggttcaacc atgaagaggc ttcagcggtt cggggaggga taccggcgct actga 415

<210> 6353

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-B3

<400> 6353

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gggcccacac cccaagtggg gggcgtgggc gcaagcgggg caacacaaaa acccgggggc 120
aaagccggat tcaagattcc caaccgggat ctcccagggg gtggacgccg tgaacgtgac 180
gagaggagat ctacgagtct tagctacagc aggagcgcaa gtcccaggcg ttccgtctca 240
cctgcaaagg aaaaggagcg cagtcgcaca cccaatggca gtaggagccc aaggagcccc 300
agcccaaggg ctttggtgag cccaccactg aaggataatg gtgcacgcaa tggctcagac 360
catgaaggca gcccgggtgg tggagagaac agc 393

<210> 6354

<211> 388

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-A1

<400> 6354

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aagatgcagt ccaaaagcat tcagtgccca gccgacagcg acgaggagca tgagcaagcg 120
aaagaagatg ggccagctgg ctgcgctgac gaggaggcac ctcttccgac gtcagtcaag 180
cctcgcgagc acgagcacgg ggaagaagaa gaacaccaaaa tggaggcccc tctcttgtcc 240
tgcgagagcg aggttgctga caaggggttc tggacgaagc tgaaagacgc tatccaccag 300
ttcatcaagg agctgatggc accgcccacc atatccgcga taattggggtt cgttgttggc 360
ctggtcccat ggctgaaatc cctaatacg 388

<210> 6355

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-A11

<400> 6355

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tgtgttgaaa aaaatgctaa ctatatataa ttgatctaac atgcaactat catatacctt 180
ttcatgacat gtcacacctg tgacatagta attcatgttc gcgtactcgc ctatacacat 240
ttctcttttg tttatgtcac atttaagaac taaaaacttt actcatgtca cattcaaaca 300
aaaacattgc aaggaagaat tatgcaagtg tcatgttgca aaaaaagggtt ataaggaagt 360
gacatattct gacaagaagt aataagaaat cacgttagaa tactatatca ct 412

<210> 6356

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-A3

<400> 6356

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ggccgctgtt cgggttcacc aagtcgaacg agctgttcgt ggggaggatg gcgcagctgg 120
gcgtggcctt ctccatcatc ggcgagatca tcacggggaa gggcgcgctg gcgcagctca 180
acatcgagac gggggtgccc atcaacgaga tagagccgct cgtcatcttc aacgtcctct 240

tctttcttcat cgccgccatc aacccccggca atggcaggtt catcatcggc gaggaagagg 300
aataggctgc tggcctcgga catgagtcgt gtgcgtttac ttttacctgt gactgtgagt 360
gatcgatcgg tgcgtctcgg tgcgcgcgcg taagtgcctt gctgtgtgta tcaattactc 420
gtgatg 426

<210> 6357
<211> 392
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-007-Q1-E1-A5
<400> 6357

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acatatgctt gccttaaaat ggtctcaaca tttctgtgaa gagtacaatc cccgtaaata 120
tagaggcact ctcttttcta ccctgcagt tccatttagg ctgatgcaac taccagatgt 180
gtaccagggtt ctcttagaaa gatatatcaa gatgcaatgc cctgattgtg gctcagtgcc 240
tgatgaaccg gcactatgtt tgctatgtgg caaactatgt tcgcctagtt ggaaaccatg 300
ctgcaggact gggaaatgcc agaatcatgc attgcaatgt ggtgctggta ttggcatatt 360
tcttctagtg aggaaaacaa caatcctgtt gc 392

<210> 6358
<211> 407
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-007-Q1-E1-A9
<400> 6358

cccacgcgtc cggcttcagc gtttttcgcg ttattattta cataatgtga cgatcaactg 60
gtgcccagcc aaaagagcga ttgaagactt gatcatcaat tcttcggatt agcctgcttc 120
tcgtcctcca gcactcttct tggcatctct ttctggagca gcgccacga gttcaacgaa 180
aaacaacatt gaatgaagat attagcgaca ttgatgacat tctttccatt aaaacaatta 240
tcattttctga ttttccagat tgtccataaa actgcactac agccagatgt caaacatctc 300
tttagcattt cttggaaagg atggagagtt cttcggatta actgattttt tttgaggcca 360

cacaatcagt ttaattcttc ggattaactg attttccaga ttaactg

407

<210> 6359

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-B10

<400> 6359

cggacgcgtg gggctactcg gtcgcggtgg tgggtggtgat ctgcctgttc gttctggcgt 60
tcgggtggtc gtggggcccg ctgggatgga cgggtgccgag cgagatcgtc ccgctggaga 120
cgcggtcggc ggggcagagc atcacggtgg ccgtgaacct gctcttcacc ttcgccatcg 180
cgcaggcggt cctgtcgctg ctgtgcgcct tcaagttcgg catcttcctc ttttccgcgg 240
ggtggatcac cgtcatgacc gtgtttgtct acgtcttcct gccggagacc aagggcgtgc 300
ccatcgaaga gatggtgctg ctctggcgga agcaactggt ctggaagaag gtcatgccgg 360
acatgccgct cgaggatggc tggggcgcggt ctgaggggtca tg 402

<210> 6360

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-B12

<400> 6360

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tcatcgacga gctcgggatg gaggtgttcc ggtcggaggt ggagaagagg atgccgaacg 120
gggtgctgga gcgcgccgag ccggaggacc tcgtcgacaa gcgctgggag cggcgggact 180
acctcggcgt gcacccgcag aagcaggaag gcctgtcgta cgtgggcctc cacgtgccgg 240
tgggccggct gcaggccgag gacatgttcg agctggcgct gctcgccgac gagtacggca 300
ccggcgagct ccggctcacg gtggagcaga acatcgtgct ccccaacgct agcaacgaga 360
ggctcgacgc gctgctggcg gagccgctgc tgcaggagca gcggctctcg ccgctgccgt 420

<210> 6361

<211> 438

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-006-Q1-E1-H8

 <400> 6361

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 catttgcata tgaagttttg tcgtgacctt tgggtccgacc gtaccggtac aacttagcat 120
 cgtacgttgc ccgagaaggg gtacgatgcg gcttcatacc cttagaggta tgaaggcaga 180
 ggacatatgc attgcattca tatgcattca ttgaagtgat atttgcagat gatgtgggtt 240
 tatactccca gaggtatgaa gatagagtac ctacatattg cattcctatg catacattga 300
 agtgatatatt gcaggtattg ttgacgcagg gaagtgttat agaacctatt gtggttggtc 360
 gaggaaatga gatgggtattg gttatagtgg gactactgag ttctatatct acaagcattt 420
 ctaattttta attgtgac 438

<210> 6362
 <211> 427
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-006-Q1-E1-G3

 <400> 6362

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 gcggcgacta gcgcctccgt ttgccaggtc ttcgtcgtcc gtttcgccgt cgactgggtc 120
 ccagcaggta catctggaag aatgggggtt taccttagca caccgaaaac tgacaaggta 180
 tccgaagatg gggaaaacga taaacttaaa ttcggacttt catctatgca aggggtggcgt 240
 gcaactatgg aagacgtca ctcggtttt ctagatcttg acaatgacac tgcattcttt 300
 ggtgtttttg atggacatgg aggaaaagta gttgccaaat tccgtgcaa atactacac 360
 agagaagtgc tccataccga agcctatgct gccggtgacc tgggtgctgc tgtccaaaga 420
 gcttact 427

<210> 6363
 <211> 405
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-G5

<400> 6363

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cagctaattgc ggcggtcttg tgaggtaag ccaccctga aacattctgt cattgctgtg 120
ttcattgccat atgaggagaa ctcatctgtc actggcattg gtgttgatgg cctcgtgaag 180
gatggattac ttgacaagct caaacacagga cccttgtttt ggatagatac agctgataag 240
cagccatgca ttggcactgg tggaatgatt ccattggcatc tcaaggcaac agggaagctg 300
ttccacagtg gccttgacac taaggccata aatgcaatgg agatgaacat ggaagcacta 360
aaggtaatcc acaaacggtt ttacactgac ttccctccac atgag 405

<210> 6364

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-G7

<400> 6364

accacgcgt ccggcgagtg agtgaacacc agccgtattg tcccgacccc gaccgatcct 60
cgcctgctgc agccatggcg acctccgcgg cgctctctac cgccgccaat cccaccacgc 120
tctgccggtc ccgcgcttcg ctgggcaagc cggatgaagg gcttggcctg agcatgggccc 180
gcgagcgcgc ccagcggagc attgtgtgcc aggcggcgag cagcatctcc gccgaccgcg 240
tccccgacat ggagaagcgg aagctgatga acctcctcct cctcggcgcc atctcgttgc 300
ccaccgtcgg catggtcgtc ccctacggcg ccttcttctg ccctgccggc tccgggaacg 360
ccggcgggcg gacctacgcg aaggacaagc tgggcaacga catcacggtg gaggcgtggc 420
tcaacac 427

<210> 6365

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-G9

<400> 6365

aacatgaatg ttcacacagct ccagtgcctc tgtgtagtag attaggagtt tagagaagag 60
 gagggaggacg acgacgagga cgacagcacg cggcgaccta atgcgaagcg gcaggttgtg 120
 gttgcgtgcg tggacgcgtc ctcgacgctc gtccatccgt gaccaaaca gaagaaaaag 180
 tatcgcgcg cggtgtgtggct tttgcctagc gtagccagcc aaataagggtt ccactgcgcg 240
 taataaatcc tagtggttga cagcagacgt agccgccact cctgctctgt gggtttcgcg 300
 cctcgagggtt tttgtgcttt gcagtgtatc tagcgtccat actaatacgt gcttccagct 360
 tccatccagt taaaagtcta ccagcttgtg g 391

<210> 6366
 <211> 419
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-006-Q1-E1-H10
 <400> 6366

gggccgaccc acgcgtcagc aaaacatcag ggcacaaca ctacaacaac tcgtgctagc 60
 aaaccttgct gcctactctc agcaacagca gtttctgcc ttcaaccaac tagctgcatt 120
 gaactctgct gcttatttgc aacaacaaca actactacca ttcagccagc tagctgctgc 180
 ctaccaccag caatttcttc cattcaacca actggcagca ttgaactctc ctgcttatgt 240
 acaacaaca ctactaccat tcagccagct agctgctgtg agccctgctg ccttcttgac 300
 acagcaacag ttgttgccgt tctacctgca cgctgcgcct aacgttggca ccctcttaca 360
 actgcaaca ttgctgccat tcaaccaaca tgctttgaca aaccaaca cgttctacc 419

<210> 6367
 <211> 410
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-006-Q1-E1-H12
 <400> 6367

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 acttggcgctc ctccgccaac ctctctctgg gcagcgcggg cggggggata tggcatcgga 120
 ggacgtggtg ggcaagagca ggggcgacac ggccgtcacc accatcgtca acctggcgga 180

ggaggccaag ctcgcgcgcg agggcggtcaa ggcgcccggc caccagatcc tcaccatctg 240
 caagtcgctc gtcgcccggcg gcgtagcagg cggagtgtct cgtactgctg ttgctccact 300
 tgaacgattg aaaatattgc ttcagggttca aaatccgcac agcatcaagt acaatggtac 360
 tgttcagggt ctcaagtata tctggagaac agagggcctc cgtggacttt 410

<210> 6368

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-H2

<400> 6368

gtcagcggac gcgtgggchg acgctgggc gggccgccc cgccgcccgc tccgcgaaaa 60
 accctagcag gcttcgccc tatcactcca aggggchgca ccatggtggc cacaagaag 120
 acgaagaaat ccacggacaa catcaataac aagctgcagc ttgttatgaa gagtggcaag 180
 tacactctcg gctacaagac cgtcctcagg actctcagga actctaagtc gaagctagtg 240
 atcatcgcta acaactgccc gcccttcgt aagtctgaaa ttgagtacta tgctatgctg 300
 gccaaagtca ctgtccacca cttccatgga aacaatgtcg accttggaac tgctgtgggt 360
 aaatactttc ggggtctgctg cctcagcatt attgattctg gtgattctga tatcatcaag 420
 actaca 426

<210> 6369

<211> 424

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-006-Q1-E1-H3

<400> 6369

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 ccatgtcgaa gcaaggaggg aaggccaagc cgctgaaggc gcccaaggcc gacaagaag 120
 agtacgacga gacggatctt gcatactctg agaagaagaa agacgaggaa aaagcactga 180
 aggagctcaa ggccaaggca caaaagggcg cgattggagg ctcggtctg aagaaaagtg 240

gaaagaaatg agactggtca cccgtctcca ttacctagag gatgataagg cagctgtcta 300
tctgtgttgc gcttcactac gtgtgattgt aacagtggta cctcttgtgt tctgtgttcc 360
gcgatgttgc agttggttgc ttgatcgana gatgtttcag cctcccatct gctagctatg 420
atac 424

<210> 6370
<211> 428
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-006-Q1-E1-H4
<400> 6370

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cattgaactc tgctgcttat ttgcaacaac aattaccatt cagccagcta gttgctgcct 120
acccccagca atttcttcca ttcaaccaac tagcagcatt gaactctgct gcttatttac 180
agcagcaaca actactacca ttcagccagc tagctgatgt gagccctgct gccttcttga 240
cacaacaaca gttgttgccg ttctacctgc acgctatgcc taacgctggc accctcttac 300
aactgcaaca attgctgcc a ttcaaccaac ttgctttgac aaactcaaca gtgttctacc 360
aacaacccat cattggtggt gccctctttt agattgctta tgagttatag ttcaataatg 420
aagttttt 428

<210> 6371
<211> 424
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-006-Q1-E1-H7
<400> 6371

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gcgcaagttg tcaggggctg tgccggagcc gtgcggcgcc cggcgggccg gagcggggcc 120
gatggggcgc tacgagctcg tccgcagcga cgacgcgcct gccgtcgccg cggatctgga 180
ggccggcacc gccgcgccgt gcgacggcta cccaagcgc cgcgtgcca cgcctctcc 240
gtctccggcg ccggcgccga cccggcagcg cctcgtctcg ctcgacgtgt tccgcgggat 300

caccgtcctg ctgatgatca tcgtggatga cgccggggca ttcgttccgg cgatgaacca 360
 ctccccctgg gatggcgtaa cggaggccga ctttgtcatg cttttcttcc ttttcatcgt 420
 cgga 424

<210> 6372
 <211> 324
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-006-Q1-E1-G12
 <400> 6372

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 gagctctccg tgctgtgcta taccgacgtc gcgctcatcc tcgtctcttc cacggggaat 120
 cgctcgtaat tatccaactg caatatggat gagataattg acaactactt cacacattgc 180
 tattttcgtg cgggacaaca gagcagactt cgctggactt taacttatag catagcatat 240
 atgtaaattt gaatgaccag cttgcggtac caagccttcg actcatgcag attaaagggtg 300
 tagaacttga tggatttaat gttg 324

<210> 6373
 <211> 388
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-006-Q1-E1-E9
 <400> 6373

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 acaacaatgg cttccctgaa ggccgcgaag cccagcggag ttgcggcgca gggcaaggag 120
 ccggcgccca agctcagcga gacggcgacg aagccgtcag ccgcgaagag cggcggcggtt 180
 aagaaggctg agcagaagcc ccgggaaacc aaaaggaagg tgaagagcag caaacaggcg 240
 gcggcgccca aaaagtgcg tacagtacgt gtggagtgtg atggagcttc catgcatgag 300
 tgaatccatg ccatgttatg aatctagtc ttcctttctt gtatcttcca tgtgacgcgg 360
 cgtgtgcgtc ccctcatgtg tgatgatg 388

<210> 6374

<211> 380
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-006-Q1-E1-F10

 <400> 6374

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 cgccgccccct ccctcagctc actccctcta gccgccatgg agctcgcccc tgtccaaatt 120
 cggttgacctc tgtttcccc tctctctgtt ggtggctggc atcccatctc ccctgcgttg 180
 gacggctgcc gcttcgttct cgtcgctggc gttcgctccct gctccagcta gttctcatgg 240
 ccatgcctct gttccctagg tccgagctcg cccaactccc tagccatctc tgctcgcccc 300
 tctctgtctc tgtgcgagca gcagcacgac ggggcagacc tatgtcctcg acgcgcacca 360
 gatgtttgat gggaggtttg 380

<210> 6375
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-006-Q1-E1-F4

 <400> 6375

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 cgtcactcac ctcgaccacc gccatggcca tggccttggc ctccgagacc gccgccgcac 120
 tcttccgctc cgccctgtcc gcgccacacg gcgccggcgc gcgcgtccgg ccgcagcgcc 180
 ggcagccgtt cttggctccg ctccacgcgg cgaagggccc cggctcggcg ccggtggtgc 240
 tggagggcaa ggccaaggga aagaagaaga aggggccag ctccgggaac cttcccgag 300
 ccctcgacgt cgagatcagg gaggcgcagg agtacctcga cagcgaccag caggaacctg 360
 ttccagaaaa ctttccattt gaattaatcg acgaagaggg tatgagcgtg gttattttga 420
 gaagggacta caaggacgag 440

<210> 6376
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-F5

<400> 6376

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agagcaggct gccggaggtg accatcgtcc cggcggcacg gccgttggct ggcgacggca 120
cagtcgacgc ggcaaaggcg gcggcaggca aggagcccgt aagcccgggc actccgtcct 180
cgggtggccgc cggccgcagc agctgtgagg agaggcgccg ggtggacggc gtcgccctgc 240
ctgggtggaa gtcgacgcc ctctgccagg agtcctgccg gtcgccggcc atgagggcgc 300
gcttccccta ctacttctga agcttcccgt tgcagtcctg cgtgatcgag ttcttgagcg 360
gcgacatctg gtgcatgctc cttacgactg at 392

<210> 6377

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-F7

<400> 6377

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atcatccaag gactcttgat gctttccatg gtacttctgg catcgtgtgc tattcatgca 120
cacataataa gtggggaaac tgaagaggtt agcatcacag ggagcccgac agtgatggtc 180
atgatggggg caaaccgaaa gataattgaa gataataaaa atttattgtg ctatctaagg 240
gctctagagt actgctgtgc gaggaccaga caatgctacg atgacataaa gaagtgcttg 300
gagcattgcc gtggttgaaa ggtgtaataa aggatatgct ttccttggat cttagttggg 360
gatcagaaaa atgttctacc aattcatgca tgtaccatag gataatat 408

<210> 6378

<211> 311

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-G1

<400> 6378

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ggtgaccatc cataccccga aggaggagga cgagctgcgc cctcctgtct tggcagctga 120
 ggtctaaggt cccaacagcg tcctcgaaat ggcagtttga tctggtccta gctaggtttg 180
 tatcttatga taagggcagt gctaagacag ttcgttccgt gtcacttctg tttaaaatta 240
 agttttgccg agacaagcta tatgtaccgg atgaaagtgt ggttccttat tgtatgctct 300
 ggaattttat t 311

<210> 6379
 <211> 402
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-006-Q1-E1-G11
 <400> 6379

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 tgccacaaaa gtttttagttc caactgggag agctagcatg gcaagttcgc gctgctttga 120
 gaacccgccg gtgctggagc cggccagcgg aggaggcgag gtggttgacg acttcggcgg 180
 gcagaaggcc tacgtcagcg gtcgcccg gtccaaggcc gccgtcgtcc tcatctccga 240
 cgccttcggg ttcgaagcgc caaacctgag gaagatagcc gacaaagttg cttcgtcgg 300
 ttacttcggt gtggtgcccc atttcctgca tggggatoca tatgacccca gcaataatgc 360
 ccatagcaat cctggaacgt ggatacagtc gcacaatccg ca 402

<210> 6380
 <211> 371
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-006-Q1-E1-E7
 <400> 6380

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 ccaacgccgg cgagaggctc gtcgtcgtcg acttcttctc ccctggctgc ggcggctgcc 120
 gtgctcttca cccgaagatt tgccaatttg cggagcggaa ccctgatgtg ctgttcttgc 180
 aagtgaacta cgaggagcac aagtctatgt gctacagcct tcgtgtccat gtgctaccct 240
 tcttcaggtt ctacagagga gcacaggac gactctgcag cttcagctgt acaaacgcaa 300

ctattaagaa gttcaaggat gcacttgca agcacaagcc agatagatgt agccttgggc 360
caaccgggg g 371

<210> 6381
<211> 386
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-D12

<400> 6381

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gaacatcagt gaacctgtgg cagcatttgg cccccctgga tccaatgggg agctcaacgt 120
cagtgtcatc gtctccactg tgccacgaga cttctcgatc gagacgttcg gcagcccaaa 180
agacgtgggg gaagtgggtc tcagaaggat cgcgaggacg aggcgaagcc cggacatcaa 240
cgctaccctt atcgacgccg ccgtgagaga ggacgcgggc aggggtgaagt actacaagct 300
ggagtccga gtcgagagcc cttctttccg gcggcacaac gtcgcggtct gctgcgtgag 360
ggacggcagg ctctacacca tgaacg 386

<210> 6382
<211> 456
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-006-Q1-E1-D2

<400> 6382

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agcatataca tggagtcagg gccgttcaat ctttgccagt ggcagtcctat ttgccccctg 120
ggagtacgaa ggaaagactt ttgtgcctgg gcagtcgaac aatgcctaca ttttccttgg 180
actcggcctc ggtcttgtga tctctggagc cgtcogtgc cagcaggaca tgcttctcgc 240
cgcctcgaaa gcgctagctg atcaggccac acaggacaac ttcgagaagg gctccatctt 300
cccacccttc accagcatca gaaagatctc tgccgacatc gctgcagccg tggctgcaaa 360
agcctacgag ctcggtctgg cgaccgtct gcctncccc agcgacctgg tgaaatatgc 420
agagaactgc atgtacactc ccgtctaccg caacta 456

<210> 6383
 <211> 438
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-006-Q1-E1-D4

<400> 6383

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ggctgggaggt cggcgccgac ttcaagttag ccatcgacaa ggacgtcagg aacttccagg  120
tcctcaaaga gatgtacaac gaggggccat tcttcagggt caccctggac ctgctggaga  180
tggttttctc caagggagac cccggcattg cgggcttgta tgacgagctg cttgtggcgg  240
aagaactcaa gccctttggg aagcagctca gggacaaata cgtggagaca cagcagcttc  300
tcctccagat cgtggggcac aaggatattc ttgaaggcga tccattcctg aagcaagggc  360
tggtgctgag caacnctac natcacaccc tgaacgtgtt ccaggcctac acgctgaagc  420
ggataaggga cccaact                                     438
  
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<210> 6384
 <211> 392
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-006-Q1-E1-D5

<400> 6384

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aggttcgtgt gcctgagggc gccggcggag gtgctcgcgg agaggggtgt gcggaggtcg  180
gtggaagggg agcacttcat gccggcgagc ctgctgcgga gccagctcga cctgctgcgg  240
gtcgaccccg cggagggggg cgcgaggcc gacgcgacgg cgcgccccga cgacatcgct  300
cgcgacaccc tcgccctgtt caggggacgag ctacgggtgt cgtccggcgt cnetgcttga  360
cttgtttctg gatgccaacg cgggtgcagtt tc                                     392
  
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<210> 6385
 <211> 425
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-006-Q1-E1-D7

<400> 6385

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cacatgcccc gataagaacg ggggagccag tgcgactgga ggatgtcaag gattgggcta 180
ctgatgtaat cgcagattct tttaccagag cagaagaagc taccaagaaa aaatgattta 240
gaagaatcta aaacaccccg tgtatctgct ttatcgtttc tctgaatcta aaacacccag 300
ttgtaaccga gttcttttac agatccatga ccatatgggt attacggcca ctatggtatt 360
ctgagagtga agccctgagt cccttggctc atgtttcggg gcnacatggt aaacaactgc 420
ttcac 425
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<210> 6386
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-D9

<400> 6386

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ggggtgcgac gcggggcacg cgcgggcggg gcacgagcgg gtgtgggtct gcgaggtgtg 120
cgagtgcgcg ccggccgccg tgacgtgccg cgccgacgcc gccgcgctct gcgccgcgtg 180
cgacgccgac atccacgacg ccaacccgct ggccgcgccg cacgagcgcg tccccgtgca 240
gcccatcggc gccgcgctg atcccgccgc ggagaaggcg gcgctgctgt tcggccttgc 300
cgcggaaggg aaggacggcg gcgacgcggc caaggctcgt gtcgacgcca gtaagctgga 360
cctcctgttc ccggacgacg tggtcgaacc gt 392
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<210> 6387
 <211> 399
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-E10

<400> 6387

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attatatgac atgcttccag attcaggttg cctacttttt ggaatcattg ctgcttaaag 120
gtactctgaa taaggcatgc tcattttaag ttagcctagc gtgtcactat ggagtttctt 180
catgatgtca ccaatgccat gatgttgtca tcagtaacaa catgtgtcaa atgtcttaca 240
aacttggtca gactgaagtt caagttcacc aaccatgaga ccattatggt gaagggtgtg 300
ccactaactt gcagtaggta ctatacgagt ttttaaaggt agacctacag atgattgttt 360
tcagcattga cacattttgt atagttaaaa catgcattc 399

<210> 6388

<211> 349

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-E12

<400> 6388

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cctcacattc agtcgccttg ggcaacttct actgtcctga acacgagggt ccggatttac 120
catccatcat cagtcaaaca tattgtcgca ttcaatgcaa cctggggttag ttgtctgtgt 180
ttgtactgat aagcgctgat atcatgggaa aacatctggt atagatgatt ccttcactcg 240
tctctaagac tctatatgtg agccgtatga tccatcctag cgtagcacct gtacgtctga 300
ttgcgttcaa ttcaactgct atagggtgat ttgcacagaa tttcgtact 349

<210> 6389

<211> 173

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-E3

<400> 6389

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catccgtcat cgatgcggcc tcaagtagca ggtcttcatt ggagaagtac aaggatgtcg 120
 agatgtgttt cacacgggga ttcaatgaac atcatgacga tcatggtcac gat 173

<210> 6390
 <211> 317
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-006-Q1-E1-E4
 <400> 6390

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 ggacatagtt ggttatgcaa aacctgggtg aataattgct gtttctggaa tattggagga 120
 gcagggtgcca aaaatcaaag aagtttactc gaggtatttg gacagaatat tggatatcca 180
 aatggatggg tgggcctgtc ttcagggaac caggagagtg tagaggaatt aagtatttca 240
 ccacgttgaa gaagggtttt gaccttacat gttttgacga ttaagagagg attaggtata 300
 taccctgtcg ttgcaac 317

<210> 6391
 <211> 323
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-006-Q1-E1-E5
 <400> 6391

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 cagtcacgaa cacattgggtg atctttcgtc gttgaccccc catgtacatg gtttttttgg 180
 agtgggatag ggatggcggg tgtgtttccc atggccattc tttgcacgtt atgaagctca 240
 tctgcaggat gctcgtaa atataagaaat gttagtcaca acagatcacg tgtccatact 300
 gtatagcgaa acttaagatg ttg 323

<210> 6392
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B6

<400> 6392

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tggggtcaac gcgacggcgg tgcctctcggc gttccccaac ttcgccgact tcgcgcggct 180
gctggcatcc actcccgtag ccagcgagct ggccgggagg tcgtccctga cgtcctcggc 240
cgtgccgaac gccaacctgc cgcagtcacc ttcggctttc gtagccggcg ccgcgcgcgg 300
cgccgacatc gccgacgtgc tgaggtagca cgtcctgctg gtagacctct ccccgctcca 360
cctcgccgcg ctccccccct cccgggaagc tcgtgacgac gctgttccag accacggggc 420
gtgcgcc 427

<210> 6393

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B7

<400> 6393

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ttctcgtact ccaccctcct cgcgcgcgtc acccgtgcgg gccacctcga ccacgcgctc 120
accttctcgc cgtcatgga ggatgacgcc gtggctccgg acctgatcct cttctccaac 180
ctcattcacc tcgccctccg cggtaggcgac gcgccaagg cgtggcgct gttctcccg 240
ctgcgtgccg cggggatcag gcccgacctc aaggcataca acgaggccgt cgcgcctac 300
tgcaagtccg accttctccg cgacgccaag cggatgctgc tccacgacat gccggccgac 360
ggcgtcgcgc ccgacgcgga gacatactcc cccatcctcg cggcgctgg 409

<210> 6394

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B8

<400> 6394

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cagcatttct tgcgatgcat ttagcagctg gtgtgccagc tctaattgtcg gcacttgctt 120
tggcatacaa tgcaaacctc tttggagcac taacacacta tagtagcggg caatctgcag 180
tatacttttg agcgggggtat gttgaccttc cggatgtatt caagctgggt tttataacag 240
ccgcaatcaa tgctgtaatt tggggagttg ctggtgcatt atggtggaaa tttttgggtc 300
cttattgagt gtcggggcag tgtaagtacg tgaaaatcgt accatattaa caaac 355

<210> 6395

<211> 246

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B9

<400> 6395

agaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaaaaaa aaaaatggga ggcccatcaa agggaataca accttcctta agcgtgaaag 120
caacgatctt taattcttcg tcagtggcac ttaattttca gttgactggc cgtgggtttta 180
ccctgtcctt gccggggtaa accctgttgt taccacctt acttgccttg catcagatcc 240
cccttt 246

<210> 6396

<211> 102

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-C2

<400> 6396

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cgaaacaaag ccatataaat caaataccaa taaaaataca aa 102

<210> 6397

<211> 361

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-C4

<400> 6397

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cttcgcgaag gctgggctgg attacgtttc ttgctcccct ttcagggttc cgattgctag 120
gctagctgca gctcagggtgc ttgtctgagg ctgcctcctc attggcaacc ggattgcctg 180
ctgctgggtgg atgtgggtgat caacagtatt attacagagc catgctatgt gaacattact 240
agtagcagtg ctcataaaag ctacaatccc atgtcctttt tttcccagc catgtaaaac 300
ttccaaactg ctccatggtt caaaactctg ttcttcaata catcatcaat tatcgattat 360
a 361

<210> 6398

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-C6

<400> 6398

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ctggacagaa gtggcacgtc ttctacgcca ctgagtacc agagcaacca atgggtaacc 120
ttgagatgtg catgactggt ctggacaaga agaaagcttg tgtctttttc aagactaatg 180
ctgatgggaa cacaacatgt gccaaagaaa tgacaaagct ctctggcatc tctgaaatca 240
tccccgatat ggagatctgc gatcttgact tcgaaccctg tggctactcc atgaatgcga 300
tccatggctc tgcattctcc acaatccatg tgacgccga ggacggtttc agctacgcca 360
gttacgaagt tatgggcttg gatgccactg ctctgtctta tggtgacctt gtcaagaggg 420
tcct 424

<210> 6399

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B3

<400> 6399

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aaaaaaaaaa aaaaaaaaaat aaaaaaaaaata aataaaaaaaaa aaaaaaaaaa taaaaaaaaat 120
 aaaaaagaaa aaaattttaat taaattaaaa aaaaaataat tttaaaaatt taaaaaatgg 180
 aaaaaaaaaa aaattaaaaa aaaagggggg gccctccaaa gggtttccct ttttttttcc 240
 gggttttatga attttaaggc cctttttaa atgcccccaa attaatattcc tgggcgcttt 300
 ttttaaaagg ttttctcggg gaaaccctt gtttttcccc atttttatcc tttttaaaaa 360
 aacccttttt tcc 373

<210> 6400

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-H8

<400> 6400

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 gtgcttcgca aggggtgcag cgacgcgtgc gtgctgcggc cgtgcctgca gtggatcgac 120
 ggccgcccagg cgcagggcca cgccaccgct ttcgtcgcca agttcttcgg ccgcgcccgc 180
 ctcatgtcct tcctcaccgc cgtccccgag ccgcagcgcc cagcgggtgtt ccagtcgttg 240
 atgtacgagg cggccggggc gacgatcaac cctgtgagcg gcgccgtggg gctgctcggc 300
 gcgggcagct ggcagctgtg ccaggcggcg gtggagacgg tgcttcgggg cggcgccatc 360
 gggccgcccgc ccgagttcga cggggggcgc gacaacacgt ttgctctggc ggccacggcg 420
 aagcggggccg tgggggtgc 438

<210> 6401

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-A1

<400> 6401

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 gccacaagga actacatgac ccagagcctt ttgggccctt cgatgtctgt tagcgggtggc 120
 atcaatgtcc cagtgatgag gaccccgctc tgtgctaata ctctgtctga gaaaggaggc 180

aagaacttca tgatcgattt catgatgggc ggtgtttcag ctgctgtttc gaagactgct 240
gctgctccca tcgagcgtgt gaagctgctt attcagaacc aagatgagat gattaagtct 300
ggtaggctat cagagccgta caagggtatt gttgactgct tcaaactgtac cattaaggat 360
gagggtttct cttccttgtg gaggggtaac actgctaata 399

<210> 6402

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-A10

<400> 6402

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cttcatacat tctggataga atcgattata ccatttcgtc atctgacttg tttgaagaac 120
tttggctcttc ctttacagac atagaagggtg ctctcaaaga catcgaagggt cttcctttac 180
cgtttcgtca tctgcaatgt gcttatagta tgagagttgc ctgctaattc ctctaaatat 240
agcattagtt cagctttagt cttcatatta catcaggtaa tggatggcat cagaactatt 300
ctctgtaatg atgggtataag agctcacttg ctaattcttc tgaacattcc ctgggttcag 360
cttgtaactt tagttagatt aatggatata atctaaacta ttcttttctt ttt 413

<210> 6403

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-A12

<400> 6403

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tggcttacta ccaggagggtg gactactgct cggaggagggt gaggtcgggtg gccccggccg 120
gcttcggccg ccacggcggc ggcgtccagc agcacgtcgt caaggagaag ttcgaggagg 180
tcgacacggt ctacgcgcc ggcgccaacc accaccacca ccatggtcac cacggcggcc 240
acggcttcgt ggtgcgcgag accagggtcg aagaggacat caacacctgc accggcgagg 300
tccacgagcg caggagagc ttcttcgcca tggctaactg agccgcccgg cggccggcat 360

ccacgcccgt tcgtgcttgc ctgcgtgcc

389

<210> 6404

<211> 320

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-A2

<400> 6404

taccacgcg tctgataaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaggat ggggggccgc ttcaatgggt tcaaacttta 180

ttttccctta aaggtaatth attttctttt ttatttttta acttaatttc atttcatggg 240

ctttctttta aaaatttttg gaagggaata cccttgtttt aaccaaattt attccctttg 300

aaacaatttt ctttttccca 320

<210> 6405

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-A3

<400> 6405

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cgcacacgcg tccgccacg cgtccgcccc cgcgtccgat tgaatttcat attgtcacct 120

gaggtgagga atcaggacgc aatatttttg ctaagagggg tgagttcagg ggcacacgag 180

gtagcatggc aatggctgaa ggaaaaactgg gattacatat tgggagccta ctctggaact 240

ctgctcacct atttctcaa cataactgtc tcgccactgg ccaccgatga acatggtgat 300

gaggcggagg agtttttcaa gagcagaacc aaggcgaaca tcgcgaggac tgtgaggcag 360

agcatcgaga ggggtgaggat caatgcccc a tgggtcaaga aca 403

<210> 6406

<211> 160

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-A6

<400> 6406

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gggatgggaa gatcctctgc tgcgttgtct tgtctgtgct catccgtgtg tactgtgtaa 120
atatgaagat gtaataacaa aaacacgcat tttagctttc 160

<210> 6407

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B10

<400> 6407

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aaggatagtt catctgaagt gtcctacgag tactgtgtaa gggtggtcag gtggctggag 120
tgcgagggt acatcgagac aaacttcagg gtgaagtttc tcacatgggt tagcctgcgt 180
gccacccgc aggagagaaa gatagtcggt gtctatgtgg atacccttat tgaggaccct 240
gtcagccttt ctggccagct cgttgacagc ttctcgagg cggtatatag caaaaagcgg 300
acgccttctg gtttctgcat ggacctgtgg cattgaagca ccacaagcac ctaccgtttg 360
ctttgtacgg agcacacatt cgggcccatt cttttgttgc 400

<210> 6408

<211> 326

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B11

<400> 6408

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cgaccttggc cacaaggata gttcatctga agtgcctac gagtactgtg taggggtggg 120
cacgtggctg gagtgcgacg gctagatcga gacatacttc agggatgatag tttctcacat 180
ggtttagcct gcgtgccacc ccgcaggaga caaacatagt cctgtctat ctggataccc 240
ttagtgcccg acctgtcag gctttctggc cagctcggtc acagcttctc ggacgtcgctc 300

tataccataa acaggcacgc cttctg 326

<210> 6409

<211> 458

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B2

<400> 6409

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cgagaagaag gcaatggcgg ccgagagctt ccttttcacc tcggagtccg tgaacgaggg 120

gcaccccgac aagctgtgcg accaggtgtc ggacgccgtg cttgacgcat gcctcgcgca 180

ggaccccgac agcaagggtg cctgcgagac ctgcaccaag accaacaatgg tgatggtggt 240

cggcgagatc acgaccaagg cgaccgtgga ctacgagaag atcgtgcgcg acacctgccg 300

cgagatcggg ttcacctccg acgacgtggg cctcgacgcc gaccgctgca aggtgctggt 360

gaacatcgag cagcagtccc ccgacatcgc gcaaggcgtg cacgggcact tcacgaagcg 420

gcccaggag atcggcgcgg gcgaacaggg ccacatgt 458

<210> 6410

<211> 379

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-G3

<400> 6410

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gacgtagaat gtttggtagt gatttacccc gatgaagtca atttggttct tcaatagttt 120

cttctctcct tctgtaaatt ttggcaaatt tggacctaa atttggcgca tctggtgagg 180

atagtcacca aagaaaaagg gatccaagat cctgttttag catatatcat caagtgagca 240

ttcaatcgtg aagacaaaaa gttagttcca atcgtaaaag ttagcatata tgatggaagg 300

ttactgaatc aattgatacc atggagcatc gaaagacaga gtcgggtta ctgccaaagt 360

gtcctctgtg atattcctg 379

<210> 6411

<211> 364
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-G6

 <400> 6411

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 gactactatt gctctcttaa taagtattat atattatagt ttaggattta acggtggtaa 120
 ctagtgggtc attatggatt ttccaaatac caaactgttt ttttaatgtc acgctaaagt 180
 actagcacac ttataatcct aagaaacaat atataaatac aattgaattt tattactctg 240
 atccacatta tgtcgcttta gaatcagtga cttagagggtg gaacgcatat gattcagttt 300
 agcttttatg agatgaggat atacgtgaca actcactttt gagtcgtttg ggatgacccg 360
 ttct 364

<210> 6412
 <211> 362
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-G7

 <400> 6412

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 actgttcttc aatcaactaa acgacttgcc ctctatcaag cagcaggaga tcaggacatc 120
 ttctcaaaa gaacagccct gcttctctgg taggaacgca gaagctgttc aactgcagga 180
 tactaatcac tcctgtcag atatgatcaa catccgcaa gcttagaaaa agcatacgaa 240
 gttcacagat cagtttgtaa cctgtaatcc ggtaatgata cataatgaag gttcagatat 300
 tgggtgatgaa tacaggctgt tcaacagtaa aacgaactcc aatgctatca tggttcatag 360
 ca 362

<210> 6413
 <211> 396
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-G9

<400> 6413

attcaagggc cgaccgaccc gtccaagctg aagttgaagc tgaagctatg agctctttca 60

ggattgatga tgacctcggg gttaaccctg atttgaacca aatctcttca aatttgcattg 120

ggttgggatc ttcaagtacc cgtgttgaga ttggtggaca tgaccgcacc ccggcatctt 180

cagaacagcg agcggagagt catggaagga agcgtgaagca aagtcagatt gctgggggttc 240

ttgaggaata tttggattac aaaaggcaac ataataataa gttgcttgat gtggtaaatc 300

agattgatca acaagctgag ggatgtaaca agaaggaaga atattgtatt ggaaagtgtg 360

ttcgtgtgtt agagtcgatg gaagatataa ctgaag 396

<210> 6414

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-H1

<400> 6414

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ggagctccct tccccgccca cggcctcggg gctccactgg cagggcggcc cgcgccacgg 120

cgcggccacc accaccgacg tggccgcctg gttcgtgccg gacatctcgt ccccgagaa 180

ccccttcttg tgctacgcca ccgcgcctgg ccagccgccg acgaagcgcc gcaggagatg 240

ttgaagtagg gaagatcgag attgtcttgt tcagtactgg agtggcgtag gcttgcaaga 300

aacaaacaca gttgctgtac tgtgtactcc catggtgacg tactatctat atactccatg 360

tcgcagc 367

<210> 6415

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-H3

<400> 6415

agagctgcag gtgcccgcgc acgtgtacat cctggaccag gccgaggagg acggcatcga 60

cctgccctac tcttgcgcgc cggggtcctg ctctctctgc gccggcaagg tcgtctccgg 120

ctccgtggac cagtccgacc agagctacct cgacgacggc cagatcgccg ccggctgggt 180
gctcacctgc cagcctacc ccacctctga cgtcgtcatc gagacgcaca aggaggagga 240
gctcaccggc gcataatcat tcatgcccac ccatctctat ctctgtgggt cgtcgttggt 300
tgtaatttga gtacgcgcgt acacgtactg cttttgtttc atttgagcac tgttcgtgta 360
agcgtcgagt tgccctgccca tcgtctctct cccctcaat ctcaacaatt tcggtgtgtg 420
cgcgcttcta tttt 434

<210> 6416
<211> 420
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-005-Q1-E1-G11

<400> 6416
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaaaagg gaaaaaaaaa aaaaagttaa aaaaaggggg ggccccctcaa 180
gggggttttaa tttttcttcc cttttcttgc aattttttat ttctttttaa ttttcccca 240
atttcatttc aggggccttc tttttaaaac ttcttgccgg gaaaaccctt gggtttcccc 300
aatttaacc ctttgcataa attccccctt tccccattgg gtttattttc aaaaaggccc 360
cccccttttg cccttcccaa aattttcccc ccttaattgg gatttttgac cccccctttt 420

<210> 6417
<211> 377
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-005-Q1-E1-E6

<400> 6417
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tgaagcggca caggcgggag atggcgggga ggggtgtgggt cccggagacg tgggggcagg 120
agaagctgct caaggactgg gtggactgcg ccgtcttcga ccgccccatg gtgccgatgg 180
ggctgctgac ggcgcgccga gcgctcatcg ccgagtgtcg cacacgccgc ccggaccgag 240

cggcgtcgtc gtcgtcttcc accagcagct ccaacccgct ccgggtgcgg aacggctgct 300
 cctgatcggg tgctctctc tccttcagac ctccgcctcc catcagcgag ctaggctgaa 360
 tcagcaagcc ttctttt 377

<210> 6418
 <211> 426
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-005-Q1-E1-E8
 <400> 6418

gtctatcata gcttgtatga tgacttcata tggatggaaa agtttgaggaga tcccttggtc 60
 cagagggcatg ttgcagctgc aagcatgtgg gggcttggtg ctcttaggct ctccagatgag 120
 gagatcctac ccttcaacta cagcaattat gccacagagc ttgagaatgg agcattgggc 180
 ataagtgaag gagtacaggg aatgcctgtc agcttatcac ccctgcacaa gtcaatcaaa 240
 gagttcagaa aggcagttgc aaaagtggat tctgaattga aggcctctaca gacatggaaa 300
 atttggtccc catggagaaa caaccctta aaggtcagag acatcaatga tcggttgatg 360
 atgaccgaac gggcattcac agaccgggaa agactgtttn gacggccatg gtacaaacac 420
 ctgatt 426

<210> 6419
 <211> 369
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-F1
 <400> 6419

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 ctgagcgtgg tgcattcagt gcacaagctg ctgagccac actaccgtga cagctgaac 120
 atcaacgccc tggcacgcca gacgctcatc aacgccgacg gcatcttoga gcgcaccgtg 180
 ttccctgcaa agtacgcgct ggggatgtcc tccgacgtgt acaagagctg gaatttcaac 240
 gagcaggctc tcccagcaga cctcgtcaag agagggtgtg ctgtgccgga ccagtcgagc 300
 ccctacggtg tccggttgct gatcaaggac tacccttacg ccgtggacgg gctggtcatc 360

tggtgggcg

369

<210> 6420
<211> 357
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-F12

<400> 6420

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gtcactcct tctaccgcg atggagctcg cccctgtcca aattcggttg cctctgtttc 120
ccccctcttc tgttggtggc tggatatcca tctccctgc gttggacggc tgcgcttcg 180
ttctcgtcgc tggcgctcgt cctgtctcca gctagttctc atggccatgc ctctgttccc 240
taggtccgac ctgcgccgaag tccctaccta tcgctgctcg cccctctctg tctccgtgcg 300
agcagcagca cgatggggca cacctatgtc ctccacgcgc accagatggt tgatggg 357

<210> 6421
<211> 372
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-F3

<400> 6421

aaagttaacc caaaaataag cgcattccag aaagcacagg attgtcttct gcccatggga 60
attacgtctg aaaatgttgc ccatcgatat ggtgtaacca ggcaagagca agatcaggcc 120
gccgctgagt ctcataggag agctgctgca gccacggcct ctggaaaatt caaggatgag 180
atcgtcccgg tgccaacaaa gatcgttgat cctaaaactg gagaggagaa ggaagttgtg 240
atatcagttg atgatgggat taggccagg accacagcat ctggattggc gaaactgaaa 300
ccagttttta aaaaggatgg aactacaact gcaggcaatt ccagtcaagt gagtgatggt 360
gctggagctg tt 372

<210> 6422
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-F7

<400> 6422

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cctatcgtgt tatgtttctg tccggttctta tctatctgtc gttgtgtggg ttacaactta 120
cgttgtaaga ctttattccc ccgctttgct actgggttat taagtttggc gttattgttt 180
tcttgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagggggg ggcccccaa aggtttaaaa 360
ctttatttcc ctgtgaagga actttaaac cctcccaaaa ggtcccaaaa aattaatttc 420
agggg 425

<210> 6423

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-G10

<400> 6423

attccagggc cgaccgaccc gtcaggtttc ttatccccgt cggcgcctcc ccagatttgg 60
ccgccgccgc cgtgaccca ggttgtcttg atggcgcccg ctgtagaagc cgtgaaggag 120
acaggcacct tccagaaggt tctgccttg aacgaaagga tactgtcatc catgtccagg 180
aggtctgttg ctgcacaccc ttggcatgat ctggagatag gtcctgggtgc tccaaccata 240
ttcaactgcg tcattgagat accaaggggc agcaaggta aatatgaact tgacaagaaa 300
actggactga tcaagggtga ccgtgtgctg tattcatcag ttgtttacco tcacaactat 360
ggattcattc ctcgcacgct ttgtgaagac agtgatcctt tggatgtac 409

<210> 6424

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-D1

<400> 6424

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 ttctttgcaa cagcagagcc cgtggatttt gtccacatgt acgatgctta tgcggactac 120
 agcagatctc acgagattga cttgtttggc gagattggag gtttagcatt cagccctgac 180
 accgaggcct tctatgtggg ctttgcggac cagacgtacg gaggcattgat cgagttcagc 240
 aagaggcacc aacatcatta ctttaactcc ttgtggatgat aaccacctga gcggaaattt 300
 ggttgacacag ctgttgacc ccattgttgc attgtgtgct ccagaggagt gcatggctct 360
 acag 364

<210> 6425
 <211> 409
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-D10
 <400> 6425

ccgaccgacc cgtccacca cgcattcgtt tccattggag gtgccaacat atccaaacct 60
 ttggaaaggt tcatactcca aatgggagcg ctacaccgtg gaagatgcac atgatattgt 120
 caactacgct aagaaaagag gtatcaatgt gatggcagaa attgacgtgc ctggatcatgc 180
 agaatcatgg ggaaatggat acccaaagct ctggccttct cccatttgta cagagccatt 240
 agatgtctct agtgatttca catttgaagt aatttttggg attttgtctg atatgaggaa 300
 aatctttcca ttctggctgt ttcaacttggg tggatgatgaa gtatacacag ggtgctggaa 360
 cacaacgct cactgcggc agtggatgga cgagcgcaaa atgaccacg 409

<210> 6426
 <211> 325
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-D11
 <400> 6426

gaccgacgcg tccaccacg cagtccgaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
 gaaaaaaaaa caaaaaagaa aaataaaaaa atataaataa aaaaaaaaaa agggaggctg 120
 ctctagaggt tggttacttc atttctcagg catgcaaggt tataacgtgt tccttctttt 180

aagttttctt attttaattg gctgtcggtt tacattcata tctcttggtt aggtcctgcc 240
gttttaaacc taaggccctt tgttttaaac ctttttttcg gtaacaccct tgttttttcc 300
aaaggtagc ccctttgttt ctccc 325

<210> 6427
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-D2

<400> 6427

acaattcgca agcccttcca acggcagtcg tggtttccat caccctcctc tccctcgctc 60
ccaccgccat cttcctccac atcccggctt tcacctcctc ctccgtcggt ggccccggaa 120
tcctagccgg ccgctggggc gggccccggc cctcccgtt ccgctcgctc ccgccccgtc 180
gcgtcaccgt cgtctgcagc agcgccggcg cggcagccga ggctcggac gccgcagcgc 240
cagtggagaa gttccggctc gacaatttgg ggccccagaa ggggtcccgc cggcggccca 300
agcgtaaggg acgcggtatt gctgcaggcc aaggcgcgag ctgcgggttc ggtatgcgcg 360
ggcagaaatc gcgctcgggg cccgggggtcc gggcccgggt ctcaggaggg gcagatgccg 420
ctctaccgcc gtctccc 437

<210> 6428
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-D4

<400> 6428

accacgcgt ccgcccacgc gtccgcccac gcgtccggtc ccggatcccg gcggtttacc 60
cctgcggcct ccgcccgtcc gcggctctgc ctcttctctc gcttctcctt gccccgcgtg 120
cgcgacgaac gccgcgcct ccgcccctaa agtcttcgtc ggacctccg tcaggattct 180
tcggggccct tcgcccggga cgatctgacg tgacgatgtc tggtcatacc caacctgaag 240
gaccacgcca acttgattca aaacatgctg tgaattcatg ccgaaagaat gtacccggta 300
catcggtcgt ctcagatttg agggatcaca tccacgagtt catcaatgca tctgcagatg 360

aacaccggac atgcttcaca aagactctca aaaaggatgt tcattatgtc aaagactgtc 420
actgatagat cctc 434

<210> 6429
<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-D7

<400> 6429

cggacgcgtg gggttttctca atgctgctga tgacaagcgg aaggaagtcc tctctaaaat 60
agaagaggat gttgctaagc tcagcgggttc tgcagccaac taagaagcta caagtgaatg 120
ccgaggagag cagcgatgac ttggctaacc caccgaaggt agaggagaag cttggtgctg 180
tccctcatgg cctgtccacc gactctgagg ttgccagag ggaagccgag tctatctcta 240
ggaagactct caggagctca gccgagaagt ttgagttcca agctgagggt tccagactca 300
tggacatcat catcaactca ctctacagca acaaggatat cttcctgagg gagctcatat 360
ctaatgcctc tgatgctgga taag 384

<210> 6430
<211> 385
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-E11

<400> 6430

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ctccgcccgc cccgaccag atcaggagct gagagatgga cgccaacagg cgccaagggtg 120
ggattcagca gttgctggct gcggagcagg aggctcagca aattgtgaat gcggctagag 180
ctgctaagtc agcaaggctt aggcaagcga aagaggaggc agagagggaa atagccgaat 240
accgtgcccga gatggaggct gagttccaga ggaaggctgc agagagcagt ggtgactctg 300
gtgcgaacgt caagcgtctc gaggaagaga caacggcgaa aatcgaacag ctcaaccagc 360
aggctgcaag catctcccca gatgt 385

<210> 6431
 <211> 428
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-E2

 <400> 6431

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 ggacaaggag ggcatacctc ctgaccagca gcggcttatc ttcgctggca agcagcttga 120
 ggacggacgc acacttgctg actacaacat ccagaaggag tcaaccctcc acttggtgct 180
 gcgccttagg ggaggcatgc agatctttgt caagaccttg actggcaaga caatcacctc 240
 tgagggtggag tcctcagaca ccattgacaa tgtcaaggca aagatccagg acaaggaggg 300
 catcccacct gaccagcaac gtctcatctt tgccggcaag cagttggagg atgggaggac 360
 ccttgctgac tacaacatcc agaaggagag caccctccac ttggtgctgc gtcttagggg 420
 tggtatgc 428

<210> 6432
 <211> 377
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-E3

 <400> 6432

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 cgaggacgac agggagcagc agctggcgtg cgggtcgcca tcggaccacg gcctcgcgac 120
 ggcgtggctg tcgctccaga ggataccgac gccaccgag ccgccgcggg agcgcgcagg 180
 tgggtccgtg acgagggacc tcagcaagaa cttcttggac tcccacggct gccagcaggc 240
 cagcggctgg gaggtggac acatgctagg ccaccggcga gccgtgcatg cgctggagct 300
 tcacaaggtc ggagcttgtt gaagagggaa gagagaaaat ctagcttagc tgcagtgagc 360
 ttgttcggga gaaatat 377

<210> 6433
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-E4

<400> 6433

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cccttccgcc gctgcggtat cccccgtccc tcgctgcgtc tccctgcagc tcttctgcgc 120
cagcgggtgga gttgtccctg gatggaggag aagatgccgc cgcattggcca tggcgcgcgc 180
ggccaccgcg gatgctgcgg cgcgcgccta cacctccgat tccctcatcc tctacttcaa 240
ggcggaggggc accatggagg agagggccat tcccaagatc acagaatctc ttgagggtat 300
ggagggagtc aaggacctgg aggtgctcat tgaagaaggc atcggaagtg ttgtgttaac 360
aaaggagaca actgtgcaag ctactggaat aacctcaaac ctggtggaag ctatccaggg 420
agctgggttc aag 433

<210> 6434

<211> 383

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-C9

<400> 6434

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agatgggtcat cgttctcgtc gtgtgcctgg ctctgtcagc tgccagcgcc tctgcaatgc 120
agatgccctg cccctgcgcg gggctgcagg gcttgtacgg cgctggcgcc ggctgacga 180
cgatgatggg cgcggcgggg ctgtaccctt acgcggagta cctgaggcag ccgcagtgca 240
gcccgtggc ggcggcgccc tactacgccg ggtgtgggca gccgagcgcc atgttccagc 300
cgctccggca acagtgtctg cagcagcaga tgaggatgat ggacgtgcag tccgtcgcgc 360
agcagctgca gatgatgatg cag 383

<210> 6435

<211> 54

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-B3

<400> 6435

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagaaaa aaaa

54

<210> 6436

<211> 370

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-005-Q1-E1-B4

<400> 6436

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cctggcgctg gcaccgcggg cgtecgccccg cagcccggcg gcctgcgcgc aggcggcgct 120

cctctgcacg ccctcaacct ccgtgttccg cggcctccgg gcgcccgcac ccgcccgcgc 180

ggccccgcgc cggcgccgct cggcgggcgtc cacgggcata gtctgcggca aggtacgtgg 240

cctcgggaat ggcgtgcgtg cgtgcgggaa tccgtgttcc acacatggcg gtgattgggt 300

tggtagccgt ggtcgtctcc tcgttgccagg tcgccaaggg cagcgtgccg ccgaacttca 360

ccctcaagga 370

<210> 6437

<211> 365

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-B5

<400> 6437

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tccaagaaa ttacagaggt tgcaggcgac gcaagaactc aacaccaaaa taaacctcgt 120

cgatactcgg agatgaactt tggccagtga acatagtgat gatagtaaata cagtgagggg 180

tcattggagc tttggatcca agtaagactt gtgcaagaga ccctggcctt accaagtgc 240

tccagcattt cactgtctga tgtctagcac tatcttgtga cccaaacgag gtttgacagg 300

aggtgttcaa accatcgctg tggtcatttg ctgtgattat tctgacgggc tgggtgttgtt 360

acaat 365

<210> 6438

<211> 374
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-B6

 <400> 6438

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 gatcaagatg atgttgcttg caatccattt cccttgaggagg gggatttata tggagattct 120
 gatgatgagg acgagcttga caattccagt ggagacaggc ataatggtgt gcagagggct 180
 ggtatgttgt cagaggggtca tcccgaaatg tcatttatag atcatgatca acagacgttg 240
 aagctagatg cagatgcaca agatgactct tgcacatcat ttgaggctca tcagggttgg 300
 tgcgatggtg gggcacatac tgatattggc aatcactaca ggagtgcga cggcctttgt 360
 ggtggtgcag aaca 374

<210> 6439
 <211> 355
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-B8

 <400> 6439

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 caagagatcc ccaaacccta cacctgcccg ccggcgact cggggaccgt cgaatcgagc 120
 aggttgacgg aggagagggg gcctcgaaga tgttccggaa ccagtacgac accgacgtga 180
 cgacatggag cccccagggg cggctgttcc aggtggagta cgccatggaa gccgtcaagc 240
 atggctcccc ctgcgtcggg ctccggtcga gcatccatgc ccgtcttagc cgccgtcaac 300
 aagccgcct cggagccctc ctccctaacag cggaagggtgt tccgcgtcgc tgacc 355

<210> 6440
 <211> 366
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-C1

 <400> 6440

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 cgccgagttc tacaaccccg tggccgacga gggggagcag aagccggcct gcctgatgct 120
 gcctctcgtg gaaacatcgc cggagttcgc ctccggcggc ttggcagagg cggacgggct 180
 ctccggcttc gacgtcccgg acatggatct cgctagcttc gcggcggaca tggagagcct 240
 cctcatggga gtcgacgacg ggtttgacga tctgggtttc ttggacgaac agaatcctca 300
 ggtgaacgcg gacgtggact tggaggccat ggcggcgccg gagcctgaac gagaggacaa 360
 gaaaag 366

<210> 6441
 <211> 400
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-C11
 <400> 6441

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 agcacattcc tgggcacccg cctggcggac ccggcgccac agaacgggcg catcgtggcc 120
 cggttcgggt tcgggttggg cggcaaggcg aagcctgctc cgaagaaggt ggcgaagaca 180
 tcgacctcct ctgaccggcc gctgtggttc ccggcgccg tggcgcccga ctacctggac 240
 ggctcgctgg tcggcgacta cgggttcgac ccgttcggtc tcgggaagcc cgtggagtac 300
 ctgcagttcg agttggactc gctggaccag aacctggcca agaatagggc cggcggcac 360
 atcggcaccc ggttcgagtc ctccgaagtc aagttcaacc 400

<210> 6442
 <211> 368
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-C2
 <400> 6442

aggcgttcgc gaagcgcgag aagaactcga tcaagaagct caccgcgtcg ctgaagaagt 60
 acgcgcccga cagcgcccc gcgctcgcca tcaacgccac catcgagaag accaagcgcc 120
 ggttcgagaa ctacggcaag ttccgggtgc tgtgcggcgc cgacggcctg ccgcacctca 180

tcgtcagcgg cgaccagcgg cactggggcg agttcgtcac cccgggcctg ctcttctct 240
 acatcgccgg ctggatcggg tgggtcggca ggagctacct catcgccatc agcggcgaga 300
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 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-C3
 <400> 6443

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 tcccccggtg ggccgcgtcc ctccccgccc ccttttaaca ataccccgag gccttgcggg 180
 tccgcgtaaa gcacatcgcg aaaagatccc ccaagccagc ctcttaaate cctccacccg 240
 ccattctcca cccgcggacg ccgctcctcg cgcccgctt cgccggggcg tggccgcccgc 300
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<210> 6444
 <211> 356
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-C4
 <400> 6444

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 ggagtggcaa aagcactggg accagactgc tccatacaac aagctgctgg tgtatgagtt 180
 ctacgaaaag aattcctcgc tgtgcaaggc catggacaag ccgttcgaga agctcgccac 240
 gcagtacaaa ggcagggccg acttctgcaa gctggacgtg gacaactttg agcttttggc 300
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<210> 6445

<211> 442
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-005-Q1-E1-C7

<400> 6445

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ggaagatccn gctgttgccg caagggcaca agggcggggg cggtagctta actgggtgcc 180
cgatgtctag cgttgtcccn nctgaagatc cnacgacatc ctcaatctcg ccttcacatg 240
attcacctgt acacatatca cggatanaca tggataatgt tgaagtctct aagttttag 300
gggttcaatg ttcacccctt gtactaatct gctttgtctc cgnaaaacga gaaaaaaaag 360
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<210> 6446
 <211> 436
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-B2

<400> 6446

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gtccaccta ccgcccgcgt gttagcctcg cgctccgcgc ctccgcagcc gaagccgccg 180
aatcgttcga ggcggaacctg cccgccgagg aggtgatggc tgtcgaggag gaggcggagg 240
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tcgggcgca gcggatcacc gccacgggcc gtcgcaagac ggccatcgcc cgcgtcgtgc 360
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gaaatccaat gtggat 436

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<210> 6447
 <211> 417

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-H7

 <400> 6447

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 tcctcactgt ctccatgcta cgaagccggc ggctgcatcg ggaaacccaa gaagtcaccg 180
 ccgccgccga gaaggccatt cttctcgtcc tattccgagg accaccagaa ctgccgcttg 240
 atctgtagct cgaagggttt caaggacggg ggctgggtgt acgaaagcgt ggagcacaaa 300
 gtgtgctgct gctccatta gaaatataat agcgtatgtt atgttgatgc atatatatgc 360
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<210> 6448
 <211> 422
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-H9

 <400> 6448

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 gcttttagcga ggcgcttgcc aagtgccttg tgaatcacct caaccggatg tggttgtcga 120
 tctcgcggag tcgagtcgag tttagtcgtg gtacgctaga tgattatgcg agctgaagga 180
 catggatcag agcaaaccag tattgggtgga ttaatcttgt ggatgcatca agccagcacc 240
 agaatggaag atgctcacca agtggtcgtc aattaacaac actaacgtag tgtttatccc 300
 aggattataa gtttgttctg ttgtggatgg tgctaagtgc cgggtgggctc ggccttctta 360
 tataagtata tcacatcttt agcttcttta ttgaggactg tcaacttaage tagcatgtat 420
 tt 422

<210> 6449
 <211> 110
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-A1

<400> 6449

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cgggtgaaggg gtacatgatt tggatagatt tagccatgta atcatcgatt 110

<210> 6450

<211> 210

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-A11

<400> 6450

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tagtagattg tatcaggagt ttttcagttc aaattgagct gcgcatgttc ttttgaaaaa 180
aaaacaaagc aaaaaggaaa caaagtaaaa 210

<210> 6451

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-A12

<400> 6451

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gctgattgct gccacggatg agtattgtgg cagcgggcaa tcccaaaata tagctctctt 180
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tttgcatctt cttggaggct tagtttggaa acttaaatacc tctccgatat ttccaaaaaa 360
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaggggggggc 420
c 421

<210> 6452

<211> 373

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-A4
 <400> 6452
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 gccacttttag cagtaaaacg gcgcttagcc tgtgagatgg tcaaattattg gcaacaagtt 180
 caagagagca ttccagagct tcctatctct gatggatggg gtaaaaagca ccggctcttt 240
 ataaagtgga aatatgttga agctaagggtg tataatctat gctactacca tcattctttt 300
 taacttcaaa ttcttgcccta agtatcaaac atgctaaatt ttcttcagat ggtatatttc 360
 tctaattgtgt gat 373

<210> 6453
 <211> 171
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-B1
 <400> 6453
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 taatggagca gattagcttg gtaattaatg agacattgca tttcttaact t 171

<210> 6454
 <211> 403
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-B12
 <400> 6454
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 cggctctggtt cgtcttcgag cgcgcggggt acagcttccc ctccgtcctc tccaacgccc 180
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ctcttccacc tcttcctaatt cttgaggtct cagatgcgat tgttgaaaaa gctgcaaata 300
atgctcttgt atggatcaat aggctgctgg ctggttggtca tgacatcgcc atcaagagag 360
ataggaaagt ttttataaag gtgataactga ttttggttggg ggg 403

<210> 6455

<211> 380

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-G12

<400> 6455

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ctcaatgctc acaagctcct atagcttccc tttttccccc ataccttcca tcaattatag 180
cttcagtatg tgaaaaccca gctcttcaac catataggct tcaacaagca atcgcagcaa 240
gcaacatacc tttatcgccc ttgttggtgc aacaatcgcc agccctatct ttggtgcagt 300
cattggtaca aaccatcagg gcacaacagc tgcagcaact cgtgctacct gtgatcaacc 360
aagtagctct ggcaaacctt 380

<210> 6456

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-G2

<400> 6456

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cgacctccag cgcgggggcg gcatgcacgg cgaggcgag cagcagcaga agcagggcg 180
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gatcttcagc ccggtgctgg ttgccgcgcc atcgcgctgg cgctcatggc ggccggggttc 360
gtcacctccg gcggcctccg cgctcgctgcg ctgtccgtgt tctcctggat gtacaagtac 420

ctgacgggca agcaccgccg ggcg

444

<210> 6457

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-G4

<400> 6457

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agtgcggcaa gaagtaccct gacctgaagg agacgagcac cgccgcgcag gccaccgtcg 180
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ccggcgaggc cgccacggc tgcagctgca gtggcaactg caagtgcgac ccctgcaact 300
gctgatcaca tcgatcgacg accatggata tgattattag ctatctagct tgtggtggtg 360
gttgaacaat aataagcgat gccgagctgg ctgccataca tatgtactgt gtggtgtgtg 420
tgacagagag agacaca 437

<210> 6458

<211> 318

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-G5

<400> 6458

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gctcatcttc cagccgccct ctccaccag cagcagagca caccatctc tccactcgga 120
tccccaaaggc ctgcctcca ttctttgcca cgacatctgt tcctgtctg aatctccaac 180
cgggcgcgtt ctgcgcgtt ggcaacggcg ctggaatgcc ctttccaacg gtcggccttg 240
gaacggtttc tcgaaccgcc taattcaacc tcgccaatct ttggctcaac ccctttctca 300
acgccgtcgc tgagctcg 318

<210> 6459

<211> 414

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-G9

 <400> 6459

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 tcaacctcgg ctaactaact ggtggaccgg caaaaggcctt ccttggtgtt gcaactggat 240
 ctccaaccaa caacctgcct tgggaacagg acaggcctta cctattatat aattaaacc 300
 ctttgggtacc tccgtttttt ttgggggtcca catctctcgt gtacaacatg catgcctgct 360
 gttgtttacc atttgctcgt gctgaaaagg cttgtatttt cggcgcctt cccg 414

<210> 6460
 <211> 385
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-H1

 <400> 6460

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 ggatgaaaga aggtgacgtg ggaagataga ccacaagggg cacgtattcg cctaaaatct 360
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<210> 6461
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-004-Q1-E1-H11

<400> 6461

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tcctgcgacg cggcgcgctt ccccgccccg cccgtgggtg gccccgcgc cgcgccgag 180

gccgccccct ggtcggccga cctctccgcg gcgctctaca acgtggacgg ctggggcgcg 240

ccctacttct tcgtcaacga cgacggcgac gtggccgtgc gccgcacgg cgccgcgact 300

ctccggggcc aggagatcga cctggccaag gtcgtggcca aggccgcggg cccgcgcgcc 360

ggaggcgggc tcggcctgcc gctgccgctg ctctgcgct tcnccgacgt cct 413

<210> 6462

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-H2

<400> 6462

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aagccagccc agaatggcgg catccgacgc gctgcagtc atcgtttaca gccgtgggtc 180

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ttccgcccgat ggctggaatg caataagaga catggttgct cgtggtgctc cagcaatagc 300

catagcagcg gcactagcat tagccgttga agtttctgat ttagatttta ttggtacgcc 360

tgaagaagca gtttcttttg tttcaaagaa attggaatac cttgtatcca gcccacaac 420

tgcagttgaa ctatctgatg 440

<210> 6463

<211> 65

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-H4

<400> 6463

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taaaa

65

<210> 6464
<211> 446
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-E6

<400> 6464

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gcggctacta ccaggcgggc ggcgcgatgg cggcggcggt cgcggtgcag ggcagggcgc 180
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gcccctgctc cgactgctgc gtgcac 446

<210> 6465
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-E7

<400> 6465

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gaggtccacg agcgcaggga gagcttcctc gccagggcta actgagccgc ccggcggccg 360
gcatccacgc ccgttcgtgc ctgctcgtgc gccttaagta tgtctgtggt tgact 415

<210> 6466

<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-F1

<400> 6466

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cgtcgctctc cgccgcgtta acgcaacca cgccctggc actgcaactc ccgaccaaag 360
cgcccggccg cctcccgctg ctcccccttct cgcgcgccgc actcccggcc gcgccggcgc 420
ctcggcattg cgcgcac 437

<210> 6467
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-F11

<400> 6467

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ccgcctacgg ccaattcggc cgtgacgacg ccgacttcac ctgggaggtg gtgaagcccc 180
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gtgactggct gctgctccat agaagatgaa cggagagaag gatgatgaag ggctttggca 360
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<210> 6468
<211> 172
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-F2

<400> 6468

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cacaagaaat tagcaaatac cccaccgat tacaagcgtt gagtaataga aaaataaaag 120
atatacaaag aagaacaaaa atacaaaaat cggaagtaa aaataatata aa 172

<210> 6469

<211> 358

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-004-Q1-E1-F4

<400> 6469

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ccgaaccggc cgccgaggcg gaggtctgtg ctctgtctgg tcccgaggag actcccgcgg 120
ccgaacaaga agcaaccgcc gaagaagaag ctgctcctcc tgctggtgcc gaagaaccgc 180
ccgccgccga gcctgtcgcc gaagcagaag ctgctgtctc ccaggagctc gccgcggacg 240
aaccggaggc tctgtctcct gctgggtccc aangagccgg ccgccgaggc ggaggctgct 300
gctcctgagg agccccgagaa ggccancgag tgaggccgtg cgcacgcagc ggcggcgg 358

<210> 6470

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-F5

<400> 6470

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ttaatatata ttaatcatcc tattttaatt aggttctaata ccaattagta gtaagtattt 180
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ctagagattc tagagaaagt gagacaaagt gaagcgaaag agttttcttt gtataagaat 300
taggtctata tcatatctaa atagaaggga aatcaaaaag aagggaagtg gggattacat 360

tggaatgaatc cttaaggaag acatatcaca aaagaaataa aggctaaagt aagcggtcct 420
 tgcctttgg 429

<210> 6471
 <211> 395
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-004-Q1-E1-G1
 <400> 6471

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 tcaaaactgg tgtgatttat aacagtaaag attacgagca gtgttttacg gttctatctg 120
 caaaaaaaaa aaaaattaca gctagtctgt gctttacaac tgctgcatca ttgtcctcgc 180
 cagctaccgg ttaccctcgc catcccaatc ctaggccgca tcttcgccgt gcatgggttc 240
 ggacggcgag ctgacctcct tcacccccga tctcttcttg gccttctgtg cccagcccag 300
 cagccctgc tgcacatgct cgttgaaaat ctcttcttg tagtagctcc ccatctgggt 360
 aacaattgca taaagcggga gcgtgctgta gctgc 395

<210> 6472
 <211> 410
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-004-Q1-E1-D11
 <400> 6472

cccacgcgtc cgacgagcga cgaagcgcgc acaaagagaa gaacctcgga gctgagatgg 60
 cacaagccat ggcgtcgatg acaggcctct cgcagggcgt cctgcccagc aggcgcgccg 120
 acagcagaac caggacggcc gtcgtcgtcg tcagggcgtc cgcggagggc gacgccgttg 180
 cgcagggcggg ccgccgcgcc gtgatcgggc ttgtggccac tggcatcgtc ggccggcgcct 240
 tgctgcaggc ggcgcgcgcc gagaccgtca agaccatcaa gattggagcc ccgccgccgc 300
 cctccggtgg actccccggg actctcaact ctgaccaggc gagggacttc gacctccct 360
 tgaaggagcg gttctacctg cagccgctgc cgccggccga ggccgcggca 410

<210> 6473
<211> 414
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-004-Q1-E1-D12

<400> 6473

acggggccaat tatatcccgt tgaaatacaa tacagaagaa gtttaaggta tcttcaacac 60
agctcctgta ctagtcatgc ccataccggg cattgacgtt gttccttgte ggtccattcc 120
tcgatggatt tttgactaac caaaatgtct ttgctttcga ctacacaact caagttctgt 180
ttttcatcat gctgtcgtgc ctgatttcag tctcggtgaa cttcagcact tttctcgtga 240
tcgggaagac gtctcctgta acctacaaag tacttggcca tctgaaaaca tgcttggtcc 300
tcacctttgg ctatgtcctg cttcagcacc tatttagctg gagaaacata cttgggatcc 360
taatcgtggt aattgggatg gttctgtact tgtacttctg cactanagag actc 414

<210> 6474
<211> 174
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-D2

<400> 6474

cgtccgaatc caagtttctc tatttctctg atcctcatta gttaacatca agcttatcac 60
actgggttaga tagtctccac ctccaccttc ctgtctacct tcgccagtag gtctgaggca 120
tgcgataacc tgctcatcgc gtgccgtcct tccagaagat catcatgttc ttgc 174

<210> 6475
<211> 208
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-D3

<400> 6475

gggtccagca cgcgtccgca cacacgtccg cttttgacga tctcccatat gacctaaaat 60
catgcttcct ctacttttgc ggcattgcc aatgaaaacc cggttaaggc tcccaaattg 120

gaatccagtt ggatggaaaa ggggttccta aaaccaaaga atgggaaaac aatggaaaaa 180
gttggaagaa tcaatttgaa ggatttgg 208

<210> 6476
<211> 475
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-D4

<400> 6476

ggtcgacatt acgggtccag cacgcgtccg gctgcacctt acccatcagc caagagcccg 60
atggagagca gtgacacgtt tggcagtggg agcgccaacg acaagtcac atgcacagac 120
attgccctct caagcaacca tgaggagtcc ctatgtttag ggcagcccag gaacatcagc 180
ttcatccaag agtctcccag tacaaaacta cagatctgat ctgaatatct gatcatgccc 240
aatgttcata gatttgtcca ggctgactga tgcaaggacc atacgatact tttgcattca 300
ggcaaggact cgagaggaag agattacgta tgttatcggg gccgctagct gttgtttatg 360
atgatgtttt gctgtgccag ttactgtga tgctgggtgg gcccctaact atactaacia 420
gagagctgtc acttgcaaac tcctgaattt ttttttggc caacgccaat tcctt 475

<210> 6477
<211> 367
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-D8

<400> 6477

accacgcgtc cgcggacgcg tgggctggtg gagttttcct agttacaatc cattttcctc 60
ctgattatcc tttcaaacca ccaaaggtgg catttcgcac taagggtgtc catccaaaca 120
tcaacagcaa cgggagcatt tgctcgaca tcttgaagga acagttgaat tcggcactaa 180
ccatctccaa agtgcgtgtg tccatctgtt ccctgctgac tgattcgaaa ccgacgaac 240
ctttgggccc ccaaataact caaatgttca agaccggccg gcacaagttc gaaaacaccg 300
ccaggacctg gaccagaag tatgccaagt agtaatttcc ctacctggcc tttggggtct 360
ctgctgc 367

<210> 6478
 <211> 393
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-E1

<400> 6478

gggtccagcc cgcgtccgca cacacgtccg atctgatcta ctgatctatt gagaggaacg 60
 gggaaacaca cctttgttgt tgttgctatc ttcataccgt cgccctgtag agaagcaaca 120
 gggcattggg atccaagccg ctgtagggtg tcgcgtttcc aaacactccg acgcctaggc 180
 gatgggggcc tctgaggact agggtttttag ggcgaggtag tagcgtagt ctttcctgcg 240
 accccttagt cctatatata gcgtcgtgtg tctgggggct ccaaccgagg ttagcgtagg 300
 ccctcccaat caagggccca tttaaagaga tagatagttg ggtttagccc aatccggtca 360
 cagttgacca gctgtagagg acacacccaa cac 393

<210> 6479
 <211> 404
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-E10

<400> 6479

agtcaggaat ctctcccttg tctacactct tgctggagtg gattgcattg attgtgcagc 60
 agatgcatct gtgggtgggag cagtgaatga aggtattgaa gtagcagcat caattgtacc 120
 aacagttcaa aggccttggc tgatgattag tgtaaatgat gattgcagag atcttcattt 180
 ccgtaaagct gagtttgatc ctgatgattg cccactggat tgctcaaagc catgtgagaa 240
 agtttgccca gctgatgcaa taccactaaa gcattccatg gttgatggag agcgcacact 300
 atctgatccc ttacgtggta aatatgaggg tgggtgaatt actgagcggg gctatggatg 360
 tggtcggtgc ttgccagttt gcccgtaga cagaataaga gctg 404

<210> 6480
 <211> 420
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-004-Q1-E1-E11

<400> 6480

cggacgcgtg ggcccccatc aagggtgggct ccttcgggca gggccgcac accatgcgca 60
agaccgtggg caagcccaag gtggcgggcgt ccggcagccc ctggtacggc cccgaccgcg 120
tcaagtacct cggccccctt tccggcgagc ccccgagcta cctcaccggc gagttccccg 180
gcgactacgg ctgggacacc gccgggctgt ccgccgaccc cgagaccttc gccagaacc 240
gcgagctgga ggtgatccac tcccgtggg ccatgctcgg cgcgctcggc tgcgtcttcc 300
ccgagctgct ctncgcgaac ggcgtaagt tcggcgaggc cgtctggttc aaggccggct 360
cccagatctt cagcgagggc gggctggact acctcggcaa cccagcctg atccacgcgc 420

<210> 6481
<211> 409
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-E12

<400> 6481

cgatagcatt atcatgaagt tccccaaaat agacgagagt ttcagaaaat gcaagactat 60
cttcgaacag tttgatgaag attcaaattg cgaaatagat aaagagggaac tgaaacattg 120
ttttcaaaag ctggaaatct cattcacaga ggaggagata tgtgatctct ttgaagcttg 180
cgatataaat gaagatatgg gcatgaagtt caacgagttc attgtctttc tgtgccttgt 240
ctatcttctc aatgaagcag ctgtcttga agcaaagata aagatgggac taggaaatct 300
tgaggcaacc ttcgagacct tgggtgatgc gtttgccttc ttggataaga ataaagatgg 360
gtatgtgagc aaggatgaaa tgatccaagc aataaacgag aacacgaca 409

<210> 6482
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-E3

<400> 6482

ggggccagca cgcgtccgaa cacacgtccg ctacaccag cacgggtag aagcactctc 60

caccgccctt agatcaaaaa caatgcccg gtcggttggg gcttactgaa attcaaaaaa 120
acgaaaaact ccgatggagc tcaaaaacga aaaattccga ccacaatttt cctcgaggac 180
ataaccgcaa aaggacgaaa aatggaccaa tcaggaagaa gaaagaaaaa aggacatttc 240
aggacatcag gacttctggg aacttcaaaa aatttaggga aattcaaatt gagatttatt 300
aagatttcgg tctccctgc agaagaccat taataacgcc ttctgagggc cccgcaccct 360
cgaaaacgct ttttgctcc gccctacaa gaaaattacc tccagacgt catttattaa 420
aagccagccg gtgta 435

<210> 6483
<211> 432
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-004-Q1-E1-E4
<400> 6483

gcgtccgatc tgacgtcggc ataacataat cgtcgtcggc tgcagtcgcc attccctttt 60
ccagtggctc gttgctcggc ctctgtccag cttccccgga agaggtagca cggcaagggc 120
agaggatgag tgaccccaag tacgcctacc cctaaccgc gcaagggttac taccaagggc 180
cgtatcacgg gccgccgtg atggcgccgc cgcagtacgc cgcgccgccg cncagaaggg 240
agccgagctt cctgaaaggc tgccctggccg cgctgtgctg ctgctgcttg atcgacgagt 300
gctgctgcga cccgtccatc atcttcgtca gctagactag acgaggaaga acctattggt 360
atatataata tgtatgtatc cagttgtact cttagcttta ttctgcaac cttcaagctc 420
cagatgatct gt 432

<210> 6484
<211> 290
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-004-Q1-E1-B5
<400> 6484

accacgcgtc cgcgttgta tactgctgtg tactgttagt ctgctgctga tttccgttgt 60

tatactgctg gtacatgtgt cgtgtgatag atgtgtcaac tatatatcaa tctcgtcgcc 120
 ggcagctctg gcatgtttga gtatgtgttg cttctctgtg gtgccggcga cgatggctgc 180
 tagtactgtt aatgtgatcg ggtctccttg aacaatggca taaatatgtt gcttgtttaa 240
 aaaaaaacat gatggcaaac tcagtggtaa aagccggact aaggaacaag 290

<210> 6485

<211> 321

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-B7

<400> 6485

cccacgcgtc cgccacgcg tccgtccttc acttccaaag tctgatcgta agaagaaaaa 60
 ggaaaagcct aaacttggca tgaaagagag tctgaagggt ctgctctcct cgaggtatgt 120
 gagggatcta gctaccctag tggttgctta tggcattagt atcaatcttg tcgaagtcac 180
 atggaaatca aaactcaagg cacagttccc taatccaaat gaatactcat ctttcatggg 240
 tgattttctca accgcaactg gaattgcaac tttcacgatg atgctgttag gacgtattat 300
 actacggaaa tttggctggg g 321

<210> 6486

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-C10

<400> 6486

cccacgcgtc cggtaggagc tgaggcggcg gaggtcggag agaagggtgc gcgcgaggcg 60
 gaggcgctgc gcggggacgc gagggcgcg atcgccgctc gggagacgct gatgaagatg 120
 ctgctgcggc tcgatgcggt gcgaggcgcg cggaataacc ggaagagggt caccaagcgg 180
 gtcctcgcgc tgcaggatgc tgttgacgcc ctcgaaccaa agccggcgcc ggattcggag 240
 gtcgtggcgg aggagaacga gtctgaggtg acgtccgaga tggtaggacga cagcgcgagg 300
 gcgacggaaa tgccggtcgc cgctgagcac agcgccggg gttgggggtga atgcggcgcc 360
 tgaaacgggt gccgatatgg aggtggacgg gggcaa 396

<210> 6487
 <211> 382
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-C12

<400> 6487

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 cctccggcga gctccacctc tccaccggcg gcagcgaggg gcgagggggc tgatactgta 120
 ggcggaggag gagccgagcc gagccgatgg ggcagcagtc gctgatctac gcgttcgtgg 180
 cgcggggcac cgtggtgctg gccgagtaca ccgagttcac cggcaacttc accaccatcg 240
 ccgcccagtg cctgcagaag ctccccgcc gcaacaacaa gttcacctac aactgcgacg 300
 gccacacctt caactacctc gtcgaggacg gattcacgta ctgtgtagtt gctgttgaat 360
 cagtcgggcg acaaatcccc at 382

<210> 6488
 <211> 294
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-C3

<400> 6488

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 ttgatcaagt cagattcact cagatgtttc cagactgaaa aggaattttt gctctgtgta 120
 ctattagga attcttgaga gattagcact taaattcttt gaaacatccc ttttctcgat 180
 gtacctccta tatatatcgt atgcttgatt catctacatg tttgtgttgc tttttgaagt 240
 atctagacct gcagttatga ttcaggattt caaatagaag ctttttatcc atct 294

<210> 6489
 <211> 421
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-004-Q1-E1-C4

<400> 6489

ggggccagca cgcgtccggc aggatcaggc caagctggct gcctcctcta tcgacagcat 60
 cgtgaacggc agcgacgccg tcatggagcc ggttggtgct ggcagcaaca cggtagtagc 120
 tgttgcccaa gttgagttgc aaacaatgaa cgtgcagcag cccgctgatg ttgccggacc 180
 cagcgagggg gtggcggcga tctccaaagg ggggaaggta nggccgaacc ggtgcagcgc 240
 ctgcaggaag agggttggac ttacgggatt caactgccgg tgtgggaact tgtactgcg 300
 actccaccgc tactccgaca agcagcactg caagtccgac taacggactg ctgccaagga 360
 cgccattgcc aagggctaata cgggtggtga aggcagacaa gctcgacaag atctaagggg 420
 g 421

<210> 6490
 <211> 238
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-004-Q1-E1-C7
 <400> 6490

cccacgcatt cgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agaaagaaaa 60
 taaaaaagat caaaaaaata aaataaactt cggaagcag tcttagactg cttcaatact 120
 atactctacg tttttcttaa ctggttatcc ttctatattg tcacgactat tcaaactctg 180
 gactatcatt acataacctc cttactgcaa aaccgcgttc ctacactat tttatcgc 238

<210> 6491
 <211> 392
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-004-Q1-E1-C8
 <400> 6491

attcccgga cggagcact tcggaagccg gaccggcga gaagcgaccg accgcagcca 60
 gtcacgtct cctcttcat ccaccatgct gagggtcgag ggcaggcgcc tctcgccgc 120
 tctcgcttg cggccgccc cgcgcctc aggtcccg ggccctctcg ccggtacact 180
 acccgccgc gacgacgac acacacgca ctgcaggcg cgtttcgcca tcgaatctcc 240
 cttcttcgcc gctgccagag ggttttcagc agagactctt gctccaagaa accaggatgt 300

gggcttatct gagctcccag caactgtggc agctgtgaag aatccaagtg gaaaaatcgt 360
gtatgatgag tataaccatg agcgctaccc ac 392

<210> 6492
<211> 333
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-D1

<400> 6492

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caagcttagc acaccggcga gatggcctcc acctccacct tctgtccac cctcgccagc 120
aggctccgcg cagccgatag cctgcgcagc gccgtgccgt ccttcgcaa gatcgtcagg 180
ttcttgcccg cgcaggcgca gatcagccgc aggcggcgcg cggcggtgct gccacgccc 240
aggggcgcg tgctggggcac cgagaaggcg ccgtcgagca agcacgagcg cgtggtcagg 300
gtgcacagca cccaaggagt tcgacgacgc gct 333

<210> 6493
<211> 315
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-B3

<400> 6493

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tgcacgcagc tagctaggag cagcagcagc ggcggcgatg ggggcctcca tgatctctc 120
gtcagctctg gcggtggcgc ctcagggcct gccgccctc ggccgcccgc cctctctctt 180
cgccgtcgtc tgctccaaga agaagatcaa gaccgacaag ccttacggga ttgggggtgg 240
cctgaccgtc gacgtcgacg ccaacgggag aaagggcaag ggcaagggt tgtaccattt 300
cgtcaacaat tacgg 315

<210> 6494
<211> 387
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-H9

<400> 6494

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cgcggtggctg ggcgggcagc tgttctcggc catggtggtg cgcaagccgg cgcacctgtt 120
cctggacgag ctgggcgtgg cgtacgacga ggccgaggac tacgtggtca tcaagcacgc 180
cgcgctcttc acgtccacgg tcatgagcct gtcctggcg cgcaccaacg tgaagctgtt 240
caacgccgtg gccgtggaag acctcatcgt caggggaggg cgcgtcggcg gcgtcgtcac 300
caactgggcg ctcggtgtcca tgaaccacga cacgcagtcc tgcattggacc ccaacgtcat 360
ggaggccaag gtcgtggtca gtcctcg 387

<210> 6495

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-A1

<400> 6495

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tttgacgcca aattgcggag ggaaagcact gatgttgagg acttgtttct tgctcatatc 120
tccggaatgg acacctggc ccgtggcctc cgcaacgccg ccaagctgat cgaggatggt 180
tccctagatg ctctcgtccg caagcggtag cgagctttg atagttagat ggggtgccttg 240
atcgaggctg ggaaaggaga ctttgaggcg ctggagaaga aggtccttga gtgggggtgag 300
cccactgttc cgtccggcaa gcatgaactg gcggagattc tgttccactc tgctctataa 360
atggcgccat gtccgtaccg gtagctcctg gaataagcaa gcactg 406

<210> 6496

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-A10

<400> 6496

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gcaacaatag agcaacaatg gcgaccaaga tattttccct ccttatgctc cttgctcttt 120
ctgcatgtgt tgctaacgcg acaattttcc ctcaatgctc acaagctcct atagcttccc 180
ttcttcccc ataccttcca tcaatgatag cttcagtatg tgaaaaccca gctcttcaac 240
cctataggct ccaacaagca atcgagcaa gcaacatacc tttatcaccc ttgtttcaac 300
aatcgccagc cctatctttg gtgcagtcac tggtagaaac catcaggga cagcagctgc 360
agcaactcgt gctacctgtg a 381

<210> 6497
<211> 425
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-004-Q1-E1-A3
<400> 6497

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ctcggccata aagctggaga ctggtaagtt gctgcttgaa cccctagacc gactgaagaa 120
tgtagacgcc caggtcaatt ttactcaagg aatccttgaa gggattgtat gagaggagct 180
tggagtttta cctggaatgg attcgatctg tttagtctta gctcttcaga agctccttaa 240
tttcttttca tctggaagga gtaattcaca ttcagaatct gatgtgatcg tgtatgattg 300
caacaatata gaggaattc caccgctgat acgtgctgct gaccgggcaa gatcttactt 360
gatgtatctg agggaccttg ctgataagac tgacatctga agacttgctt caccttcatt 420
actga 425

<210> 6498
<211> 441
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-004-Q1-E1-A5
<400> 6498

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gcacaggcgc gagaagcgcc ggctgtcgaa ccgcgagtcg gcgcggcggt cccggctccg 120
gaagcagcag cacctggacg agctggtgca ggaggtggcg cgctgcagg ccgacaacgc 180

gcgcgtggcg gcccgcgccg ccgacatcgc gtcccagtag acccgcgtcg agcaggagaa 240
 caccgtgctc cgggcccgcg ccgcccagct cggcgaccgc ctccgctccg tcaacgaggt 300
 gctccgcctc gtcgaggagt tcagcggcgt cgccatggac atccaggagg agatgccggc 360
 ggacgacccg ctgctgcgtc cctggcagct gccctaccgc gctgccgcca tgcccatcgg 420
 cgccccgcac atgctccact a 441

<210> 6499

<211> 447

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-004-Q1-E1-A6

<400> 6499

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 gtctagcaag caccgacgact accgcggcga gtatcctcaa gaggaggagg agcacaagga 120
 ggagttccgg cctccgtctc ctgccccgtc ctacacggag aaggacgtgc tctcgtcgat 180
 gctgagacgg ctcggtgagc tggagggcag ggtgcagggtg ctcgagacga agccgtccga 240
 gatgccgttt gagaaggagg agctgctcaa cgcagccgtc cgccgcgtgg acgcgctgga 300
 agccgagctg atctccacga agaaggccct ttacgatgct ctgatgcgac aggatgagct 360
 gctcgcgtac attgacaggc aggagctgat caagttccgt aaaaagaagt tctgcttcta 420
 agatctgnac atggagcagc tggtcac 447

<210> 6500

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-A8

<400> 6500

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 aggtgtcacc aagaatttgt gtccgcttaa aattgtattg gacagagtgg ttttgacctc 120
 aaccggtgtg cttcttggcc tgtggcaggt tgaatctggt actgatcctg cagaaatccg 180

ctcaagattg agagaagctc ttcctcgtgc acctcaaaag caactgtatg accctgttct 240
gcttcacacc tcgtttgcac gaattctgcg acatcccagg ctccctaaag agcaaagtgc 300
atcatcgttt gataatgtca agttcttcca tgagctagtt gctcaaatta atgagaagat 360
ctgtggcttt caggcgacga tatcagagct atggtatgtc gaagagtacg atgttcttgc 420
attggcactg 430

<210> 6501
<211> 71
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-B1

<400> 6501
acgcgtgggc cgccgcggac cgtctcggtc gccgaccacg tgtatgtagc cgtccgcagc 60
aggggctcca g 71

<210> 6502
<211> 461
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-B2

<400> 6502
ggtcgacatt accggggcca cgcacgcgtc cgcccgagg aagacgagga agagaactcc 60
gagcccttgc caccgccttc gctgttccag ggggcagctc agcgtccttc catcacagcg 120
gcctcttaga tgatcgtgaa ctgatctag atctcaccac cgctgtgaa cgaagctgaa 180
tctggaaccc tggagagtgg agagtgactg ggtgataacc gtgcagaaac ccccgacgag 240
tgaccacat cgccggcagg ctctcgcgg cttgtgaact gaatcacggc acatgtaaaa 300
ctgaatctgg cagagcacac acgcgcctaa gcctattagc gtctatagac tttgcagggc 360
tatgtatagt agatatgtag attgagaccc tgctgaactt gtacgtgcag tatgttctta 420
gtcacttggtg taacattact agtaatgcag tatccctcgt g 461

<210> 6503
<211> 312
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-H8

<400> 6503

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gcttacgctc ccatggcgag ccaggtgatg aagagcagcc tcgtcgtgca ctcgaggccg 120
aggggcctgt caggcgtgc tgcgctcaca aggcggcccg gcgggttcaa cgttcaaggc 180
aatcaacccc aaaaaggaac gttacaagtt gttcaaccca acaaccggga accctttcat 240
cggcagcctg aaaacgcggg tcacttcaag cccgctcgtg gcttgggtacc tctccaacct 300
cccggcctac cg 312

<210> 6504

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-G11

<400> 6504

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acgtaccatg gtacaatagc aattgggctc atcaggggtga aggcgacagt atgatggctt 120
caatggagcc tttgctgtac actgctcatg tggatatggt aatagcaggt catgtccatg 180
cttatgaacg tgcggagcga gtctacaatt ccagacctga tccttgtggc gctgtccaca 240
taactatcgg cgacgggtggg aaccgtgaag gcttggcccg caggttacgt taaccgaagc 300
cagcgtggtc ggtcttcagg gaagcgagct ttgggcacgg cgagctaaag atcgtgaact 360
ccaaccatgc ccaactggacc tggcacagaa acgac 395

<210> 6505

<211> 366

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-G12

<400> 6505

accacgcgt ccacaaccag aagatcacct tccctggtga agctgatgaa gcgcctgata 60

ctgtcactgg agacattgta ttcgtcctcc agcagaagga tcaactccaaa ttcaaaagaa 120
 aggggtgaaga tctcttctat gagcacacct tgtctctgac cgaagcacta tgtgggttcc 180
 aatttgttct tacacatctg gacaacaggc agcttctcat caaatcagac cctgggtgaag 240
 ttgttaaacc tgaccaattc aaggcgatta acgatgaggg gatgccatt taccagaggc 300
 ctttcatgaa ggggaagctg tacatccatt tcacggtgga gttccccgac tcgctggcac 360
 cagagc 366

<210> 6506
 <211> 382
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-G3

<400> 6506
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 agcaccattt tcaaacgatg ttgcttttaa tattatagag aaagagcttg ggcttccact 120
 ggatatgggtt ttctctgaga taacaccaga gcctgttgct gctgcatctc ttgggcaggt 180
 ttaccaggct aggcctccgt ccagtgggaa gattgttgct gtcaaagtac aaagacctgg 240
 agttcaagca gcaatttcat tagacatata tatcttgagg ttcttagcta atcttgcaag 300
 gaaggctgcc aagttgaaca cagaccttcc agctgtgctt gacgaatggg catcaagcct 360
 attccgggag atggattata ga 382

<210> 6507
 <211> 338
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-G4

<400> 6507
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 agcagcaggg atggcgctc tgaagctgta cgggatgccg ctgtccccca acgtggtgag 120
 cgtggccacc gtgctcaacg agaagggcct ccacttcgag atcgtccccg tcgacctcac 180
 caccggcgcc cacaagcagc ccgacttctt caccctcaac cctttcgggc agatcccggc 240

tctcgtcgac ggagacgaag tcctcttcga gtcccgcgcg atcaaccggt acatcgccag 300
 caagtacgcg tcggatggca cggacctgct ccccgcca 338

<210> 6508
 <211> 405
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-H1
 <400> 6508

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 atgttcgtcc tcatcctcgt cctcttctgc ttcaccgtct tcgccttcgt cgtcaccaac 120
 agggcgccg gcgaggccgt ctccggccgc ggatacaagg agtaccgcct cggggactac 180
 tccaactggc tgcagaagcg cgtcgagaac accaggaact gggaccggat caggagctgc 240
 ctccaggact ccaaggtctg caagagcctg caggacaaga acgagaccgt cgcccagttc 300
 atgagttcca gcctctcccc catcgagtct ggctgctgca agccccccac cagctgcggc 360
 tacacctacg tcggcggcac ggactggacc ccggtgacca acaac 405

<210> 6509
 <211> 383
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-H10
 <400> 6509

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 tggggatccg ttggagaaag gcaccttact gggaccactg cacactcctg cttcaaaaga 120
 gaactttttg aaaggcattc agactatcaa atctcagggg gggaaaatcc tttttggagg 180
 atctgccatt gaatcagaaa gaaactttgt gcaccaacaa ttgtgggaat tacaccttct 240
 gcaccagttg tgaaagaaga actcttttgt cctgtccttt atgctgtgaa atttcagacc 300
 ttgaaggaag caattgaaat caataactct gttcctcaag gattgagcag ttctatattt 360
 acaaagaggc caagatatat ttt 383

<210> 6510

<211> 83
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-H11

 <400> 6510

 aggaaccctt aggtccggaa ttcacaaaac aaaaaaaaaa aacctacctt caacaaaagg 60
 aaaaaccaaa aaacctgaca aaa 83

<210> 6511
 <211> 269
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-H12

 <400> 6511

 cccactcgtc cgggtgaaaca tgagaatctt gtcaagttta ttggagcttg caaagaacca 60
 ttgatggtga tcgttagtga gctactacca gggatgtcac tgaaaagtta cctgcatagc 120
 atacggccta gccaaactaga tacacacact gcaataagct atgcactgga catagctcat 180
 gcaatggact gtttacatgc caatggcata atacatagag acctgaaacc tgataattta 240
 ttgcttacag caaatcgcaa gaagctgaa 269

<210> 6512
 <211> 363
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-H2

 <400> 6512

 gcgtccgccc aagcgtccgc ccacgcgtcc gcacacatac atagtttctt ctactacacg 60
 acgacaaaca tggggaagcc tgccaagatc ggagagtggg gtggatacgc cggcgatcgt 120
 cgggatctga gggctactcc ggaccggctg atcgaggtga aggtcacggc ggacaacagc 180
 agctgcatcc gctccatctc cttcatctac atcggagccg atggcaaacc gtacgaggag 240
 gggccatggg gtttcggcca tgctggcacg gagtacaaga ttgatctgtg caggttcgac 300
 gagagcttga cggagatctc cgggaccacg ggcccagcct acaacattga caatctggtc 360

aag

363

<210> 6513
<211> 399
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-H3

<400> 6513

cgggccggcc cagcgcgtcca ccaccacttc ctgcgcttcg ctctccccag ggaccaccta 60
gacttaatgt actcgtttgt ggaatatatt tgttattggg gccttcgtca cttgctgttt 120
tgcttccgca ctggtaactt ggggggatct agggtttcag gaggagagtg gagatcatcc 180
cgatgatgat gcgaggtgga aggctcacgg gtttgacctc tcaggttctg aggtgcttca 240
gcacggagat atttgtcagc agattatcat tctatacgac agaggaagaa ttcaaagata 300
ttttttcacc atttggcacc gtagaggaag ctgcacttat gagagaccac caaactggaa 360
ggatgaaggg atttggtttt gtcaaataatt catcgcaag 399

<210> 6514
<211> 432
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-003-Q1-E1-H4

<400> 6514

gtccagcagc tcggacttac ccggccggtt cgatggctcc ggccggcaagg ccaagggggcc 60
cctgctgata cctttcggga tggggcggcc caattgcccc ggggaaacgc tcgcgctgcg 120
gaccgtcggg ctggtgctcg caacgctgct caattgcttc gactgggaca cggttgatgg 180
agctcagggt tgacatgaag ctanccggcg gctgaccatg ccccgggccg tcccgttgga 240
ggccatgtgc angccgcgta cagctatgag tgggtgttctt aagaggctct gaaaacctca 300
tggatcgaat tgctggcatc gtctgaaggg tgtatgacgt agcttccgag ttccgagcat 360
atatattcac ttgccttgta acaatttaat tttcgccgat tgtatggaat ggattttctt 420
tttttttctt gg 432

<210> 6515
 <211> 299
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-H5

 <400> 6515

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 atattgagaa gctactctta ctcattccacc atgaataatc tttgctgcag tggagcttca 120
 tgtcggcgaa caatgcaaac gttgtacttc tttcatgcga ttgagtagtt gatgttttac 180
 ttctgttgcc accaacagtt gaacgctgta cttgcatatt gataagatct cctgtgcttcc 240
 tttctagttt gcgttggttac tgatgaattt agcaaacggt ttattggtgg ttttatttg 299

<210> 6516
 <211> 433
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-H6

 <400> 6516

 cccacgcgtc cgccttactg agctttcatt caactggact ggcttcatca atgccatgat 60
 atcaaacatc tcattcactt acaggagcat ttattccaag aaagctatga ctgacatgga 120
 tagcaccaac gtgtatgctt acatctcaat aatcgctcta attgtttgca ttccacctgc 180
 attgatcttt gaagggccca agctaagca gcatggattt agtgatgcca ttgcaaaagt 240
 aggtttgaca aagtttgtca gtgacctatt cttggttgga ctgttctacc atctgtataa 300
 ccagattgct acaaacacct tggagcgagt ggctcctctg acacatgctg tcggcaatgt 360
 gttgaaacgt gtttttgga accgtttccc caatcattgt ttttggaac aaaattagca 420
 caaaaactgg aat 433

<210> 6517
 <211> 380
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-H7

 <400> 6517

gacttctcgc ttgcctgctc cagatctccc ttcgcagccg gccagggacc ccttcacagc 60
gcgggagatg gctgatcagg aggccccagt tgcagttgag gcaccaaccc cagttcttgg 120
agagccaatg gacttgatga ctgcgctgca gctgggtgatg aagaagtcaa gtgctcatga 180
tggacttttg aaggggtcttc gcgaggctgc caaggccatt gagaagcatg ctgctcagct 240
ttgcgttctt gctgaggact gtgaccagcc agattatgtc aagctgggtga aggcgctctg 300
tgctgaacac aatgttcacc ttgtcactgt tcctgctgct aagactcttg gcgagtgggc 360
tgggctttgc aagattgact 380

<210> 6518

<211> 378

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-G10

<400> 6518

cccacgcgtc cgcccacgcg tccgcggacg cgtgggaccg tatccgagca ggacagcagg 60
ttgttcagcg atcactcgag cggtcgagcc ctgcgcgcgc ggagagtgtc tccagtctca 120
agtacagcgg aggatggaga gcggcttgct tgacaccgcc gcggctgccg gtctctgccc 180
ggtaggcggc cggggccgcc gcgtccggag cacgggcacg gcgaggtgct tcctcagctg 240
ctcctgcgct tccagagact gcagggtgaa ccgcgtccta ctcccaatct catcagcccg 300
gatgctgagc ggggggtgcg tggcgggcgc gcaagaggct cttcaggagc gaccgggccg 360
agctgctggg cgtcgcca 378

<210> 6519

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-F1

<400> 6519

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accgtgaacg ccgcgccgct gcacgcgcac ttcgaggccg tcgcgcgcga cacggctcggc 120
gtgggcgcgc tccgtggcgc catggagccc tgcattggca gcgaggactt cgcgtccttc 180

tcggcgccgcg tccccgcctc gcacttctac ttcgtcggca tagggaacga ggcgatcggg 240
gccgtgcacg ccgcgcactc gccgcacttc ctctcgcacg atggtgcgct cccgtacggc 300
gccgcgatgc acgccaacct cgccatcgag tacttgcgga accacgcgat agccaatagg 360
tccgttggtc cccacgacga g 381

<210> 6520
<211> 402
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-003-Q1-E1-F11
<400> 6520

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atcaccgagt tctgcaagac catcggcgcc gactccaagc agcggcaggg cctcatccgc 120
ctcgccaaga agaacggaga gaagctcgga ttccttgccct gagacgacca tgttctacgc 180
acatatataa gtatataatc tataagtact acatcatcaa gtagtggcgg acaatgataa 240
ttatattgat accttcttcc ttgctcccat cgagtcctct atcaagtggg agccagtaca 300
tgtcatgtga tgatgcttca attcagcttc cgatgctcgg ctgtccatca tcagctagct 360
gcatgctttt gttttgcttc attcctgcag agattactat tg 402

<210> 6521
<211> 431
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-003-Q1-E1-F2
<400> 6521

acccacgcgt ccgattgtac tgaatactct gaatacggca aggttcactg tggctgtgga 60
ttctttcacc aggactgggt atgtaccctc attgaaggat ggaaactcac aagagacaat 120
atttaatcca ccttggcgac attcgcccggt cgcaatagga tcaagatttg gggaggcggt 180
tcaagaacct gcttcgttta ttgctataaa acctttgttc gaggatgaga ggtatattgt 240
tacatataac ccgacaaagg acaaggtcta tgctttgctc aaggaccaag caaagcctga 300
tgacattctc aaggccgctt ttcattgcaca tgtgctactg cattttatca atgctacaca 360

tgctaaccgg aatgcaccgg aaccccccaa cttcaatccg gtcacaccag tataaccac 420
tgaacatgga c 431

<210> 6522
<211> 345
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-F4

<400> 6522

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ttctttgatc aggaccgggt atgtaccctc attgatggat ggacactcac agtatacaat 120
atttaatcga ccttggcgac attcgcccgt cgcaatatga tcaagatttg aggacgcgtt 180
tcaagaacgt gcttcgttta ctgctataaa acctttgttc tcggatcaga ggtatattgt 240
tacatataac ccgacaaacg acaacgtcta tgctttgctc acggaccact cagtgttga 300
tgacattcgc aagtgtactt ttcatgcaca tgtgctactg ctttt 345

<210> 6523
<211> 436
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-F6

<400> 6523

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gttcgtcggc cccacgttcg ccgcgctcac tggcctcgtc ttcaaagaag gtctctgcta 120
tgggaaactg gaagctggca tcttgacgtt tcttatccct gggcttcttc ttgggcattt 180
gtctggttta atggataaca gcacaaaggc aggtctttta ggactgtgga tgcttctttt 240
cacaatcttt gccgctagaa aattccagca gcccatcaag gatgacgtcg gagacaaatc 300
tgttttcatg ttcaacgctc tcctgaaga ggaaaagaag gcgtggatcc agaaactcga 360
gaggcaaaag gggcaagaat tgtttgagta tgaaaagatt accttgtctt ggtgcagcca 420
atagttcgtc cgtgaa 436

<210> 6524
 <211> 376
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-F7

 <400> 6524

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 aaaaaaaaaa agaaaaaaaa aaaaaaagat aaaaaaaaaa aaaaaaaaag aaagaaaaaa 120
 aaaaaaaaca aaaaaaaaaa aaaaaaaaaa aaaggggggg ccccccaaag gggttcaagcc 180
 ttattttccg ttgcaggcga ttttaaacc cttcaaaggt ttccccaat ttcatttcag 240
 gggccttctt tttaaaagtt ctttaaggga aaaacctggg ctttacccaa tttatcccct 300
 ttgcaacaaa tccccttttc ccagtggggc ttaatcctaa aaaggcccca acgttttgcc 360
 tttccaaaaa ttgccc 376

<210> 6525
 <211> 380
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-D12

 <400> 6525

 cccacgcgtc cgcccacgcg tccgcccacg cgtccgcca cgcgctccga cgaacgcagg 60
 ctcccagaaa cagcagcccc cattggattt ggaagcttct ccatgggaca ccgagcctcg 120
 tagacgaagc agaggggacc agagaaaccg aggagcaaga agcagggagc catggcgctc 180
 ctctaccca agctcacaac gccgtcctgc aagttgcccc cgagccccct cctcaagccc 240
 cagctcgtcc cgccggggcca cggcggcggc aagattcaag gctcctccgt ctccggtctc 300
 ggcgcggcgc aggtcgcggg cccggggccac ctacgcctcc tgctcctgct cagcgctctg 360
 cagcaggcgg ccggccccgc 380

<210> 6526
 <211> 361
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-D2

<400> 6526

aaggctacgg tgggtggtggc ggcgggtacg gcggtggcaa ccgtggcggc ggctacggca 60
actccgacgg gaactggagg aactgagcgg tggggcccgc gcggccaagt tatectgttc 120
gctaccgtgt tgtttaccct agtcagagt gtttatcttc gttcgtctcg tgtttgttgt 180
tgcccatctg tgtttttgat tgaaggtcgc tctgtgtcag ttgttagtgc tgtgttcac 240
ctcgggtcca gcagacccat gcatcaacca gcatggactg cggatcgatg ggtgctgtta 300
ccccggtcag gctttattct aagttaaate ctaaggaaaa aaatgggtgt tcttgggtgc 360
t 361

<210> 6527

<211> 450

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-D4

<400> 6527

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gcgagcgcgt gcgcgtcgac ggcctcttcg tcagctcgcc ggcgtccagc cccaacacgg 120
acggcgtcca cgtcgagaac accaagtccg tccagatcct caactctagg atctacaacg 180
gcgacgactg cgtctccatc ggcgcgggat gctccgatgt ccacgtcgag aacataacat 240
gcggccacgg ccatggaatt aggtacctgt cagtctgtca ctactcact caccaacgtg 300
cttccatggc gcgcggtacc gtttgtagt aacctgacgc ggcgagctgc tgctgtcacc 360
ctcgacgcat cggcagcctg ggtgtccaca acaccacgc ctgcgtgttc aaagtccag 420
gtccggaacg tgcggatact cgactccgac 450

<210> 6528

<211> 297

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-D8

<400> 6528

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tacaccgcct taacgccgtc tatcgaatcc gtaccgctgg gaaggatcac tggggagcgg 120
agccaggctg ccgacccact gttttgtcga cccgatggca gcggaccagg gagactggcg 180
gcggttgagg cccggttttg ggatgtagaa gatctgcgat gtctgcgaga tcgtaccggc 240
ggttctcttc agtgccgtgg atcaggctgt gttttgccgg ctttgcgacc attaggt 297

<210> 6529
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-E10

<400> 6529

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tgaaccagaa catgatgggg ggctacacct ctctgccgc cgtgaccacc gatctcatcc 120
agcagtacct ggacgagaac aagcagctga tcctggccat cctcgacaac cagaacaatg 180
gcaaggcgga ggagtgcgaa cggcaccaag ctaagctcca gcacaacctc atgtacctgg 240
ccgccatcgc tgacagccag ccgccacaga ccgcgccact atcacagtac ccgtccaacc 300
tgatgatgca accggggccct cggtagatgc caccgcagtc cgggcagatg atgaaccgcg 360
agtcgctgat ggccgcgccg tcttccatga tgtacgcgca accgttcttg tcgccgc 417

<210> 6530
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-E11

<400> 6530

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gtctacggat tttaattgaa ttgttctcta gtcgagtgtt cgactagcga acggaattcg 120
tctaaattca actaaatcaa acgtcgacta aaatatcgaa tccgatatcg tctagtttaa 180
tccgtctaca tctcgctccc gtgacgatgc tgacatcgtc tccgggggga ttccgattgc 240
gatgccgcac ccggttagca cagtttaaaa ttacttatt tctaaaagtg tcgggcctag 300
tgccaattta aaaataaacg attaaggaca gactgaaatt gtcacctaaa tattttgctt 360

ggtttgagca ctctctataa attcggtaaa tacactactt ggggtaagct attagataaa 420
cg 422

<210> 6531
<211> 363
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-E12

<400> 6531

cccacgcgtc cgcccacgcg tccgcgttga tcgagcccac gtcggggaac atgggcatcg 60
ggctggcggt catggcgggc ctcaaggggt acgagctcgt gtcaccatg ccgtcctaca 120
ccagcctgga gaggaggggtg acgatgcggg cgttcggcgc caacctggtg ctgaccgacc 180
cggccaaagg gatggcgggg acggtgagga aggcgacgga gctgtacgag agacatccca 240
gcgcgcacat gctccagcag ttccagaacc ctgccaacgt caaggtgcac tacgacacga 300
ccggaacggg aaatctggaa ggacacgctt gggcaggtcg atatcttcgt catggggatc 360
ggg 363

<210> 6532
<211> 378
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-E2

<400> 6532

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acgagaaggg caacgtcccg gcgtccgtga agatccagct gatacacaag ctggtcggcg 120
cgggcctgtc ggttgtcgag gccaccagct tcgtctcccc aaagtgggtg ccgcagctag 180
ccgacgcaga ggaggtgctg aagggtataa agcaggagcc aagcgtgcgg taccgggtgc 240
taacacctaa cctcagaggg ttcgaggctg ccatcgcagc cggcgcgaag gaaatcgcg 300
tcttcgcgtc cgcgtctgaa tccttctcca gttccaacat caactgcacc atcgaggaaa 360
gccttgctcg gtaccgcg 378

<210> 6533
 <211> 384
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-E3

<400> 6533

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tgaatgggta ccatttcgat gagcgaagac accttcggat ggtacttgac gcttttaggc  120
atgggaagga acagctgttg gatgatctat ggcactacct gtgccgtcac agccgtgtcc  180
cgccctcccc tgtcataatg gaaagattct gcctaaaact gatgcaggga gatacactgg  240
cggcgatctc ctgcgtcagc agcttccatg agggcaagat atgcaacgtc tcctccatgt  300
catggctcaa tctgctgagc cgcaatgcag ataggctgaa ggaggagcat gttaccaagt  360
tagctcatga actcaacagc ctca                                     384
```

<210> 6534
 <211> 131
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-E4

<400> 6534

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cacgcgtcca gaaaaaaaaa aaaaaaaaaa agaaaaaaaa aaataaaaat aaaagtatca   60
aaagaatata tataaatggg taaaatttac aatgagcgaa gaaaccttaa aaatggtaat  120
tgagcggttt a                                             131
```

<210> 6535
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-E5

<400> 6535

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accacgcgt ccgccatgc cgtgacagca ccagtagac cccctccctg gcgatcgccc   60
ccgccccag ccatggacac cgtcggcctc gacttcctct ggctgcggca tccgtcctgc  120
tccccgtcc atcccttgct cctctccata gacgcccaga ccgatgccta gctctcccat  180
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ggccgcccctg gatctccatg gtcgagtttt tcccctgcag gatccccccc aatggcgcct 240
 ggtctttttc ccttggttga aaacacctct gcacttaacc cctctgttg atggtcgacg 300
 tctctccatc catggtacct aggtctccat cctcatgcc ctgcagcttg ttctcaagcc 360
 gcccaaccatg gtgcgtcgtc cgctcgggtg aagacttgtc atttcctttg ccaa 414

<210> 6536
 <211> 388
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-B5
 <400> 6536

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 aaacaaaaag aataaaaact tacatacacc tacaagctaa aatccttcct cttccaaaat 120
 ggggcgggccg ctcaaattggt tgcaccctca ttacccttg ttctgaaggt gaaacccctt 180
 caagtttgcc acctaaatcc atttccaggg cactcccttt tacaccatct ggctgggaa 240
 ccccttggtt ttcaccaatt taacccccct gcagtaaacc cccctttccc cagatgggga 300
 aacaccaaatt aggcccgcac tattccccct tccaatcatt gtcacacca aaatggcaac 360
 tggaactccc cctgtactag cgcattaa 388

<210> 6537
 <211> 357
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-B6
 <400> 6537

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 caaggccacc gtggacggct tcagtgtac ggacttccac cggcggtgcg acttcaagg 120
 cccctgcgtc gtcgttggtt acaccgacgg tggcttcctt ttccggcggt tcagcccga 180
 ggggtaccga agcacggacg actactacga cacgctggac gcgttcctct tctactggc 240
 ggaatctacg gaggtctcgg cgccgccctt ggtgctgcc aaggtgggcg ggagctgcg 300
 ggcgctgttc gactactccc gcggcgggcc acagttcggc gccgacagcc tgctcat 357

<210> 6538
 <211> 193
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-B7

 <400> 6538

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 aaaaaaaaaa aaaaaaaaaa aaaaaaata aaaagaaaaa agtgaaaaaa gacttccaac 120
 ggcagtgact acttcaaggc ccacagcgtc ttaagttggc tacgccggcg gtgccttccg 180
 tttcggctgg ttc 193

<210> 6539
 <211> 391
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-003-Q1-E1-B8

 <400> 6539

 ctgctacctg tgctgatgtt actttccgga acatgtgggc agaatttgaa tgggaaaata 60
 aggtggcagt gaatactgtg attcaggatg agaaggaatt cttgaatcac attatcaaatt 120
 caacaaacat gaagtgtctg acaccaccgt ctgcactaga cggagaatgt ggtttccttg 180
 ctgctaattt ttatgcaaag agtgtgtttg gtgaggatgc tttggtgaac atcagcattg 240
 agaagcaaca tgatggcaag ctgagtgggtt acatccgaat aaggagcaag acccagggaa 300
 ttgcactcag cttaggtgac aagatttacc tcaagcagaa ggggtggcagt taactgtgac 360
 aagtgtctga gttgtancaa caattttccc c 391

<210> 6540
 <211> 427
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-C1

 <400> 6540

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 aggtaaatggg attcttactg aagggtcaaac gagcaaagtt cgttttggat gaaacacgaa 120
 agtggatgtg gaaggccaga ggcaggacca cgcacaattt caaacaacac ctaatagtgg 180
 cacagaagct cctccatttt gtcgatgcat ttcattcagta tgtcatggac cgagtttattc 240
 atagtgcattg gactgagctt tgtgatggca tgacggctgc taccacactg gatgaggtca 300
 tggaagtcca cgaggcatat ctctcttcta ttcaacgaca atgctttgtg gcctctgata 360
 agctgtgggc cctcattggc agtcgagtta agactattct tggattggca ctggacttcc 420
 acaatgt 427

<210> 6541
 <211> 396
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-C10

 <400> 6541

ctgcacaagc tgtgcagtc gaataaaatc aggacagata aggcagcctg aagcacttgg 60
 gatattctgca gaactaaaag ataagggtta tgctttgttg tgtgttggtt tcccatctgg 120
 cgatgttgaa gtcgagactc aagatgaaga tgaggtatat tggctccaat caggacagat 180
 aaggcagcct gaagcacttg ggatatctgc agaactaaaa gataagggtc atgctttgtt 240
 gtgtgttggt tcccatctg gcatgttgga agtcgagact caagatgaag atgaggtata 300
 ttggctccaa ttcgggagat actttgcacg agggccagtg gaaagagatg attacgcgct 360
 agaacttgca atgggagacg aatgagctgt gcctaa 396

<210> 6542
 <211> 336
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-C11

 <400> 6542

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 aaaataaaat aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa acaaaaaagc 120

aaaaaaaatt ataaaaattht tggattcaaa acagaacaaa aaaaaggggcg cactcataa 180
 atggtttttaa ctttatttaa ggtggcgggc cccttaaggg ttcacccctt atttccctt 240
 gatttccatc tccggggccc tcttttggtt ccccccaact tgtgtatacg gggctttttt 300
 taaaattttc cccttgggaa aaccctctcc ttttcc 336

<210> 6543
 <211> 398
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-003-Q1-E1-C12

 <400> 6543

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 acgtacggct gcaactgttc cgcgcaacc agaaggacta cagtgaagca ggcgggtggg 120
 ttatcggtc catggcaagg tcaggaactg aagatgtggg aggcctttaca gaagcacagc 180
 ttcaagagct tagggaaata aaaccaaaga aaagcagcac ccagcggaac gcgcttgctt 240
 ccgtgctgcg cctgcagagg aagatcatga gaacgatcaa ggagagcatg gacgagctca 300
 acagccagcg caaaagcatc tgggtggagcc ggtggatacc caggaggagg tangccggcc 360
 gcaggcgcac atgtacatcg tccacttctg tatgaaac 398

<210> 6544
 <211> 324
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-C2

 <400> 6544

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 caacaaggac taatcaccat gcgcattgctg cgagcaatga agggtttttc ctaccatata 120
 tgtttaaatg caatgcactg caacttgctg gcagcaaaga gtatgtgctc ggtagcttc 180
 ttgctcatct gactgagggt actgctgatt ggaatggctt ttggatctat aactagagta 240
 tccaggatcat ttgtacttag gcaagtgtgt atactactct atgctggatt atcgaaatgg 300
 gggatgggtt cttccctacg ttgt 324

<210> 6545
 <211> 365
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-C3

<400> 6545

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 gtgaggatca cttcaacagc tgttctgagc atgatgggct gttcagcact gaactgctgc 180
 atagacggat ggagaaaaca gcagaaacgc tgggttttagc tggatcacaca atggatagtg 240
 ctgagcttct gaatattgct ctggacaagt acatgaaaaa cctgattagg tcatctgttg 300
 agttagtagg aggtagtgtt cagagggatg caaggaaagg gacaccaacc tacaagcagc 360
 aagcc 365

<210> 6546
 <211> 372
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-C4

<400> 6546

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 tcttgcaggt tcctgggtgtt ccaatcatgt acatcacaaag acataggtat tcgatagaac 180
 ggctccctga ggccacaatt ggtggagcac caagaatctg atcgggtgcag acatgagatg 240
 ttctgggatg taatactatg gcggtacttg tccatctgac caagtcacta tttcatgttt 300
 cagtccacga caaggactaa gataagaacg ctgctttcta gggtgagctt actgtaacta 360
 ctaagaaatt tt 372

<210> 6547
 <211> 254
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-C5

<400> 6547

attaaatccg gcacgagacg gacaggatcg acggaggcgg catcgccgtc gtgaagccgc 60
caggatgttc acacgaatcc caggacgatg agacgcaggc taggatcgag cgattatgga 120
gaatggctgg tgctgtctac atgacacctac ttactggatc ccggtattac gtttatatgc 180
cttgccttg tctcctcag ctcgactctc ttgctttagc gccaggcctg gtaggcttag 240
ttgtacctgc ttca 254

<210> 6548

<211> 348

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-C6

<400> 6548

aggagctgga gcgcggcacc ggggggttcg acgacgcgca cctcgtcaac ggcagcgtgt 60
acaaggccaa catcgacggc ctggtgttcg ccgtgaagaa gatgaagtgg gacgcctgcg 120
aagagctcaa gatcctgcaa aaggttaacc acagcaacct ggtgaagctg gaggggttct 180
gcatcgactc ggcgacgggc gactgctacc tgggtgtacga atacgtggag aacggatcgc 240
ttgacctgtg gctgctggac cgcgaccacg cgcggcgccct gaactggcgc gcgcgcctcc 300
acatcgcgct ggacctcgcc cacggcctgc agtacatcca cgagcaca 348

<210> 6549

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-C7

<400> 6549

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tgccgttttc tccaaagaaa ctggcagata catcgaggaa agcaaattga gagttgttct 120
tgttagtcca taccaatccc tcgaagagca acccactaat ggaattcatg aactgagcc 180
agctgttgaa gttcctttac tgaaagagat gccaaattta gggagcgaag taccagatgt 240

tgcaaaagaa attcctgccc ctctggtaca aggtccagca attgtgaccg gaataccttc 300
acctgtcaaa gaggttccag gcctgagaga aattcctgtg ccaactgaacg aagcaccaac 360
tttattggca gaatttcctt cccctcaaaa 390

<210> 6550
<211> 136
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-003-Q1-E1-C8
<400> 6550

caggagcgc tcagcttgat ctgcgaggtg tgcctccta ggtggttata agatatgcgc 60
tgtatttga tctatcagaa cttgtgtact tcgtatatta cgaacttgag aactgtatgg 120
atgtgtgcat tgtgcc 136

<210> 6551
<211> 408
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-003-Q1-E1-C9
<400> 6551

accacgcgtc cagacgcacg cagagccgca gagatccgtc aactgcaag ttttgaanaac 60
tgaactgtaa gatggcatca gcagagcttt cccgtgagga aaatgtgtac atggcgaagc 120
tcgccgagca ggcagagagg tacgaggaaa tgggtgagtt catggagaag gttagcgaana 180
ctgttgactc ggaggagctc actgtggagg agcgcaacct cctgtctgtt gcatacaga 240
acgtcattgg agcccgcgt gcctcatggc gcatcatctc ctccatcgag cagaaggagg 300
agggtcgagg caatgaggac cgtgtaaac tcatcaagga ctaccgtggc aagattgaaa 360
ctgagctcaa caagatctgt gatggcatcc tcaagcctct cgaatctc 408

<210> 6552
<211> 437
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-003-Q1-E1-B4

<400> 6552

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cgacgacgtg tacgtggcgg tcggcagcgg cggctccagc atggcggctc tgcctgggc 120

gctgcgccgc ctgcccaagc cgcgcagctt cgtctacctc gtccacgtct tccccgtcgt 180

caccagcata cccaccccat gaatgatgcc taagagccaa gcaagcccg agcagatcga 240

aacgtacctg aaccaagaga gatcgaagag gcgagacatg ctgcagaaaa tcttggaacca 300

gtgccgcgag attcaggtta ccgttgacgt ctacctcatc gaaagtgatc agattgctaa 360

cgcgatcatc gagcttgttc ctgttcctcc gcataagtca acgggtacta ggcgtctcaa 420

agtcaaatgt gcggaag 437

<210> 6553

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-D1

<400> 6553

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ttatgaagca ggcgcgagcg ccctactcgg cctcctcgac ggcggcctcc acccgagca 120

gcacgaagcc gacggcgacg ccgacgagca cgaggccgct catggtggcg gcgatcctga 180

agatctcggc ggcggcggtt atctgggcgc cgaacgcccc gccgcgccgc ttctgcccc 240

cggggctgag cgacgccacg accttggcga aggagtagtc ggcggtcttg cgcaccccca 300

gcatggtcac cttgttgagc cccttgaggc cgctgtaggc gttcatgccc tccacgtacg 360

tgacgccggc ggcgggcctc ctcttggtg ccggggccgc taacgacgg 409

<210> 6554

<211> 365

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-003-Q1-E1-D10

<400> 6554

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 taagatcaag agtggcgcaa tctcttgac caaggagctt ctgagagatg tgctcatttt 120
 catcaataat gtaataacat tctatccgaa ggctacattg gagcacatgg ctgcggttga 180
 gcttcgtgag tctgcatgca aaactgtgaa gcagagtgc agcttggttct tgaaaagcca 240
 tggagagacc ggaacagctg gtgcccctgt agtaaagaat actcgagtcc tgcagcctcg 300
 atgcntggc cccggtgatg caaggccaag caaggttttc ttcaaggacg ctactgccaa 360
 ggaaa 365

<210> 6555

<211> 340

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-H8

<400> 6555

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 ttgttggtgaa gtaaagcgag gcaccagttt tgctgggtgga ttttttttct ctctcacgtg 180
 aataaagctc aaaacagtaa acagagcagt gctttcatat cagcccatat tttttttcta 240
 atattgttga gtggtattga tggcaattgg gaattgtatg atttacttgc cttatgaata 300
 aagcttgaaa gaaacaaaat aaagattagt attttttttc 340

<210> 6556

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-A1

<400> 6556

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 gttgcctcac gatgcaccgc caccctggg gtctctgccc accgcagcac gggcaccag 120
 tgccgctaca cgctcgaaaa gctccgcaag cgctatcgca ccgagggcgc ccgtcccgtc 180
 acctcgctct ggccctactt ccgccgcatg gatctcctcg aactgaggcc actcgccgtc 240

gcgtcttccg cttacccggc cgcgactggt tcaccgcctg acgccgacgg cgaccaacaa 300
 ggataggagg aatactacga ggtggaggaa cacgaagcgg aataataaga catgcacgac 360
 gcaaacgagc aggatgaaaa actcccccaa cccaagaaca acaccggag catcaacg 418

<210> 6557
 <211> 357
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-A10
 <400> 6557

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 atttacaacc cagtccacca cgggccacac aatccccaaa tctaaccctt ccgacggcga 120
 tggggatctc gagcatgccg gagccgcggg acagcctgct ggggtacctg gtgtacaaca 180
 cggatgatctc gatcgccggc ctggcggggc tgggtgcggg cggcgctggt gttcctggac 240
 ctgcatgccg cgctgccgcc cggggacgac ggccggggacc gactggcggc gtcggcgccc 300
 ggctggcgcg agcggttcct cagggccttc cggccggcgc tgtacgacgt gctggcg 357

<210> 6558
 <211> 397
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-A12
 <400> 6558

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 agcgcttcat caccgagggc gccggcgcg cggcgccacg ccagcagccg gagctgcggc 120
 actcagaggag cgtcggcagc gtcgccatgc tgctgctcgg ccgcgaggca gatcgcgacg 180
 acaagaggaa gctgacgctg gccaaagcca acctgaaagg gccaccacaa gaagcaggag 240
 gagctggtgc ctggcaggaa ggcgtttcgg accagggacg tagccccggc cgccgagcca 300
 ccgtcgccga ggggtgctgc catctgctgc gcgcctgct ccatcttccg ggatgccggc 360
 gccggtggct cgtcgtctct ggccggcgcg gccaaaga 397

<210> 6559

<211> 270
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-A2

 <400> 6559

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 ggtaggccta gatccggaaa ttttgcaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaaaaaaa aaaaacaaaa aaaaaaaaaa aaaggacgac aacaaaaagg agtataaaca 240
 aaaagaaccc tcgaaaaaag accagaaaga 270

<210> 6560
 <211> 383
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-A3

 <400> 6560

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 cgtgctgggc cctcgaagac gagtggccct aaatagttgc agctgatctt cctaccgtcg 180
 ttttgctccc tcgggctccc tcacatttaa attgtaaaaa tggtaaaatt atatacaaac 240
 ggggttcgat tccaaccacg gttcttagct ttaaaccat cttcatcgt acctaaccac 300
 caaaaacaca catctatgtg ttttatattt tatattttgt atttaaacat aaatataaat 360
 ataaatcgta acaatatata tat 383

<210> 6561
 <211> 380
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-003-Q1-E1-A4

 <400> 6561

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agtccaagta aactgcagcc tcccaggtgt gccagagctg accatgtcct ttgctaacct 120
 tgcaattatc aatgatgtta ccttccaccc ctgcgtccga ttcaggcctt gggaatcaaa 180
 tcagatccta tcatttggtc ctcccgacgg gcagttcaag ctcatgagtt acaggggtca 240
 gaaactgaag aagacaccga tctatgtgaa accacaatta acatcagatt ccgggaactg 300
 ccgtgttagc gtgatggctg ggattcgaaa tgatcctgng aaacctattg attcgataac 360
 agtgcagttc cagttgcccc 380

<210> 6562
 <211> 368
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-A5
 <400> 6562

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 gccgcccga atccggaggg gaagctctc gacgacgtag cggccagtgg cagctcggac 120
 gatggcctcg tccaactccg ccgccccggc tcccgcgcac gggggcgacg acctcgacca 180
 gctcctcgac agcgcgctcg acgacttcac caacctcgat ctctctgctt ctgccgcccc 240
 caaaagctcc ggcgaggcat cgggggtcagg atcgggaggg aaggggccag tgaaggggct 300
 ggggctgggg cttccggacc ccaaggcgcc gaagcggcgc gcggggaagc agccgccgcc 360
 gaagggcg 368

<210> 6563
 <211> 360
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-A6
 <400> 6563

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 ccatcggcgt gcccgagccc ctttcggtgt tcgtggacac gtacggcacc ggcgcgatcc 180
 ccgacaagga gatcctgaag atcgtgaagg agaacttcga cttcaggccc ggcatgatca 240

tcatcaacct cgacctcaag aaaggcggca acgggcgcta cctcaagacg gcggcctacg 300
ggcacttttg gagggacgac cccgacttca cctgggaggt ggtgaagccc ctcaaggcgg 360

<210> 6564
<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-A7

<400> 6564

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gctcagtcca cccatcgag gggatggcgt cgtcgttcgc cgtggcaacg gtcccgtcgc 120
tggcgcccc ggcgccaag aagcggtcg gcggcgtcac gtacgtggag ggcatgaacg 180
cctacagcgg cctcaagggg ctcaacaagg tgaacatgct cggggtgcgc aagaccgccg 240
actactcctt cgccaaggte gtggcgtcgc tcagccccgc ggggaggaag cggcgcgggc 300
gcgcgttcgg cgcccagatg aacgccgccg ccgagatctt caggatcgcc gccaccatga 360
acggcctcgt gtcgtcggc ctccccgttc ggttcctgtc tgcttcggg tggaggccg 419

<210> 6565
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-A8

<400> 6565

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aacacggccc ccttcgcgca gcggttcgca gagacgctgg actactacac ggccatcttc 180
gagtccatcg acctggcgct gccgaggac gacagggagc ggatcaacat cgagcagcac 240
tgcttgcccc gggagatcgt gaacctggtg gcctgcgagg gcgaggagcg ggtggagcgg 300
cacgaggtgt tcggcaagtg gaaggcgcg ctgatgatgg ccggcttcag cccgtccccg 360
ctcagcggcc tgggtaacgg caacaatcag aaagctgctg caaagctact cgccggacta 420
caagctcgcc g 431

<210> 6566
 <211> 377
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-B10

 <400> 6566

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tatcgtctgt ggcaaggag cttgcactaa ctggacttgg tccaacgttc aagtttctgg  180
tggaagaag tacgacagct gccagaaact ttcccagcgt tgcttcttgc taagggatat  240
ccatttatta attttccaac tccacttga ggatttaca cgtgtaatat ggaaagatag  300
acttcattct tgtatataac ataaccattg gggccagctc gacaagttct tgctgtggtt  360
cctaacaata taactct                                     377
  
```

<210> 6567
 <211> 392
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-B11

 <400> 6567

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ctctgcaaca agacagtttt accccttata aatctctcct ctggccaacg tcccagcaac  120
gagtgagcat ccacccgact tagattagca gattcgtttc ctctgggttcc ttcattgaact  180
catgctgaaa tggattgcta attaattgcta ttgtgggttg ttcattactg attgatgagt  240
actatacatt acctgacatg ccgtcacgac acaaatttcc ttgctttact caattactca  300
gtgtacaatt ggtgcatcaa aattcaaat ggacttgctg ctgtgattta ttcattgcttg  360
gatcgattca ggtggcataa gtactaactt tt                                     392
  
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<210> 6568
 <211> 237
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-B12

<400> 6568

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tagacatctc tctctggac gacttcgcag caactagtga ccatggaccc cacttagatt 120
accacagtcg tttcgtccgg ttccttcagc agctcacgcc gaaatggttt gctcatgaat 180
gctattgtcg gttgtgcatt catgattgcc tattactata ccttgccctg gatgccg 237

<210> 6569

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-H7

<400> 6569

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tactggatcc caaacaacat gggcctttgc tcttggaaacc atcagtagcg actagcgata 120
gcgagtgcga ggcttcacc accaccagta gcgagtgcga ggccgaccgt caccgcgagc 180
ggcgccgaac gcggcaatcc cccctcgatg acggtggctc caggccgggg cgtaactcc 240
aacggcagcg gcgtgctccc aatcagggtca gccgtcagaa aacgcgtgac cgccgctgtg 300
tcttggaaatt tctcgctat ttcgtcctgt gttttttctt ccattttgtg tacacaattt 360
cctttttggt gatagggttg gtcatttact taggtaaagt 400

<210> 6570

<211> 368

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-G2

<400> 6570

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agcgcacgac aacggtggaa atcatggacc catagaaatt ggttttttgt atagtagaga 120
tagagattag tcatcaccat gataaattcg accaaatttg aagatgattt ggtatttggc 180
aacaacaact ttactacta ttgagaaac cccaagtaaa attgaagcta aactacacta 240

atgattatatt taggcaaata aatcgagaca atgtatttca atcataaatt gaaggcaata 300
 gtagtgaatc taacctagaa cattgttgga gtcattgagct tcatcacatt ctataaaatt 360
 tttaaaaa 368

<210> 6571
 <211> 405
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-G3
 <400> 6571

agctgatgat gaagggggag tgcgtaaggc aggaggtgat ctggcagcac aagctattgc 60
 caatgctcat gcagctgctg ctttggttgc aaacaaggct gctaataatg caaatcagca 120
 aataccagga tctgcaacag ccccttgat tcctttactc acagcatcaa accaacaaaa 180
 tgatgaggcc actgctcggg cacttcaggc tgcaatgaac ttgcaacaaa atctggcaag 240
 gatacaggcc catgcagttc cagaacacta tgaggctgaa cttgagatta atgatttccc 300
 acagaatgcc cgttggagaa tcactcacia agagacactg gcccctattc atgactggac 360
 tggctgctgct atcactacia ggggaacata tattcctcaa ggaaa 405

<210> 6572
 <211> 404
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-G5
 <400> 6572

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 ccggccgacc cctacgaccg cgccaccgcc cgcttctggg ctgacttcat cgacaacaag 120
 tgcttgaagc cgatgtggct gtcgatgtgg acggacggcg aggcgcaggc gcggttcgtc 180
 agggagacga aggagagcct ggggggtgctg gacgcgcaac tccaggggaa gaggttcttc 240
 gccggcgacg cgctcggctt cgtcgacctc gccgcctgca cgctgggtca ctggctaggc 300
 gtgctggagg aagtggccgg agtgcacctg atagcggcgg acggcgagta ccccgctctg 360
 cgccgctggg ccaaagagta cgtctccgat gaggtcgtga gccg 404

<210> 6573
 <211> 381
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-G6

<400> 6573

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gcgccagcgc cgccagctgc cgcaccttac cctcccgtcg gaccacttcg ccttgccgct   120
gccaccgcag cctcagccca ccgccgcgcc gtccacctcc acgtccgacg cccgcctctc   180
cgactacgag aggtctctccg ttctcggcca cggcaacggc ggcaccgtgt acaaggcgcg   240
gcaccgccgg tccgcgcagc cggtcgcact caagctattc gcggacgggg acacctcggc   300
ggcgcgcgag gccgagatac tgatgctcgc cgcggacgcg cccacgtcg tgcgcctaca   360
cgcggtgatt ccgtcggccg c                                     381
  
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<210> 6574
 <211> 323
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-G7

<400> 6574

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ctcaacacgc acggtcccaa cgaccgcacg ctgcgcgagg ggctcaaggg tgacccacg   120
tacctggtgg tggagcagga caagacgctg gccacctacg ggatcaacgc cgtgtgcacc   180
cacctcggtc gcgtcgtgcc ttggaacggc gccgagaaca agttcatctg cccctgccat   240
ggatcccagt acaacaacca gggcaagggt gtccgcggac cggcgccctc gtcgctggcc   300
ctgggttcacg ccgacgtcga cga                                     323
  
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<210> 6575
 <211> 387
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-002-Q1-E1-G8

<400> 6575

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tccctcctta tgctccttgc tctttctgca tgtgttgcta acgcgacaat tttccctcaa 120
tgctcacaag ctctatagc tttccttctt ccccatacc ttccatcaat gatagcttca 180
gtatgtgaaa acccagctct tcaaccctat aggctccaac aagcaatcgc agcaagcaac 240
atacctttat cacccttggt tcaacaatcg ccagccctat ctttggtgca gtcattggta 300
caaaccatca gggcacagca gctgcagcaa ctctgtctac ctgtgatcaa ccaagtagct 360
ctggcaaacc tttctncta ctctcag 387

<210> 6576

<211> 332

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-G9

<400> 6576

aggttgggaa ctggaatgag cataactaatc tcaaagagca atccatcact ggtaacttca 60
tttgccttct tgctgtgtgg atatcttctc agttcatatc atgagggtgag atctgttgta 120
ctaaacaccc tgaatagggc aaggttcact gtggctgtgg attctttcat caggactggg 180
tatgtaccct cgctgaagga tggaaactca caagagacaa tatttaatcc accttggcga 240
catgagccag ttgcaatagg tttgcgctct tagtaatctt atatattcct gtatgctggg 300
gcaatgtaga acctctactc atcagttttg tt 332

<210> 6577

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-H1

<400> 6577

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atgcccaagg tttcagatgg acgccttct tatcttctcg ttaatgctga tgagagtgg 120

cctggaactt gcaaagatag agaaatcatg cgccatgacc cccacaagct tctggaagga 180
 tgccttattg ctggagttgg aatgagggca tcagctgctt acatctacat tagaggtgaa 240
 tacgtgaatg agcgtctcaa ccttgagaaa gctcggcagg aagcgtatgc agctggactt 300
 ctgggtaaga atgcttgtgg ctctggttat gattttgatg tgcattattca ttttgggtgct 360
 ggtgcgtaca tctgtggtga atagaccgcc ctac 394

<210> 6578
 <211> 344
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-H10
 <400> 6578

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 tcccacggcg atctggttgt gagacgtgta cgcaaccag gaggtgggag atcactgggc 180
 gctgcgcgtg tcgcaccacg cgccgggcat cctccactgg tggatggagc agagctggct 240
 gccacctcc acggtggtgg ccggcaccac gccgctgcc aacgagcgcg acgccgagat 300
 ccggagcaag atgaaggcgg acggcacgtt ccagcagaag cggg 344

<210> 6579
 <211> 329
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-002-Q1-E1-H11
 <400> 6579

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 cggcggcgtc cagcagcacg tcgtcaagga gaagtctgag gaggtcgaca cggctctcacg 180
 cgccggcgcc aaccaccacc accaccatgg tcaccacggc ggccacggct tcgtggtgcg 240
 cgagaccagg gtcgaagagg acatcaacac ctgcaccggc gaggtccacg agcgcangga 300
 gagcttcctc gccagggcta actgagccg 329

<210> 6580
 <211> 348
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-H12

<400> 6580

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agggattggg aagggcaaca ttagcctata ttacagttgc ctcttttctc cttggagcgt   60
tatgttctgg aatagctggg tttgttgga tgtgggtgtc cgtacgtgca aatgtacgag   120
tttcaagtgc tgctcgctgc tctgcaaggg aatcattgca gattgccgtc cgtgctggtg   180
gtttctcagc cattgtgggt gtttgcattg ctgtatttgg cgtggcaata ctgtactcaa   240
cattttatgt ttggcttgga gtagattcac ctgggtcaat gaaggttacc gacttgcctc   300
ttctccttgt gggatatggg tttgggtgcct cttttgggtgc ccattttg           348
  
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<210> 6581
 <211> 373
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-H3

<400> 6581

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gaccgccacc gtgatgatcg tgattctgag aggagaagag atcgtgacag agatggtcac   180
cgtaggcata gctcccgtc cccttctaag agtcgtgacc gtgaccgcag atctagatct   240
cgttcacgct ctgatcaaa gagcaagcgc gtgagtggtt ttgaccaagc acctccacaa   300
catgcacttc ctattgttgc tgctggtgct atccctggtc agcttcctgg tatcactgct   360
cctattcccc ggg                                     373
  
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<210> 6582
 <211> 380
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-H4

<400> 6582

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cgggcatctt catcccgagag ttcttgacca agatcggcgt cctcaacacg cctcctcgtt 180

acaccgccgg cgagcagcag tacttcaccg acaccaccac cctcttcacg atcgagctca 240

tctcatcgg ctgggcccag ggccgccgtt gggctgacat catcaagccc ggaagcgtca 300

acaccgatcc catcttcccc agcaacaagc tcaccggcac cgacgtcggg tatgtacatc 360

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<210> 6583

<211> 165

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-H5

<400> 6583

agcccacgcg tccgcaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagaaaa aaaaacaaaa 60

aaaaaaaaaa aataggtgga cgtacatgag gattcatact tctttgaggg tgcaaaactaa 120

ggttcaattt attcgagagt cgtattataa atgtaattaa tggga 165

<210> 6584

<211> 331

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-G11

<400> 6584

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cgagagctac ggacgaatgt ggccacacat gcacacgagg atcatcgcgg ctctgatggt 120

ttaccagacc accatgatcg gcttcatctc cctgaagaag ttcgcctacg cgtccgttct 180

cgtgccccctg cttccagcca gcataatctt cgcctacgtc tgccacatgc gcttctaccc 240

ggcgttcgcc aagactcccc tggaggtggt ggtgcggcac gacctgaagg agactccgaa 300

catggaggcc atctacaccg cgtacatacc g 331

<210> 6585
 <211> 375
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-H6

<400> 6585

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aggatccagt ctcgcggtcg cggccacgct gagggacagc gagaagagac agacacagat   60
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cctacacctt ctccgcaatc ggtatcgccg tctccatcgg cgtctccgtc ctcggcgcg   180
catggggtat cttcatcacg gggagcagcc tcatcggggc cgccatcaag gcgcccagga   240
tcacttctaa gaacctcatc agtgtcatct tctgtgaggc tgtcgcaatt tatggcgtaa   300
ttgtggcaat catcctccag acaaagcttg aaagtgtgcc aacatctcaa atgtatgatc   360
cggagtctct tcgag                                                    375
  
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<210> 6586
 <211> 388
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E4

<400> 6586

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cggatacgtg tacaaggacc agatcaacac ctctctcacg cagttctcag ggttcattga   180
cggctatggt ccagccggat atgctctgtt cgtacttgta tatgcaggat tggaggttct   240
cgctattccc gcaatacctt taaccatgtc agctgggtcta ttatttggtg gtgtgaccgg   300
tacaattatt gtttcaatca gtggaacact agctgcagcg gtggccttcc ttatcgctag   360
atacttcgcc agagatagaa ttcctaaa                                                    388
  
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<210> 6587
 <211> 392
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E5

<400> 6587

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gatttcgacc gtgctcggat gttccggtct ggtcttgttg gggttcacgct tcatgggtca 180
ctttcacatt actactacca tatctgtgag gcactattcc cattcaagga ttggtgggtt 240
gtccctgcaa aggttgcatt cgatcagacc gtttgggtctg caatctggaa cagtatctac 300
ttcgtgggtct taagtttctt tcggttggaa tcacctacca ctatctacag tgaactcaag 360
tctacattct ggcccatgct taccgctgga tg 392

<210> 6588

<211> 331

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E6

<400> 6588

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cgtggatgaa cggctctggag atctgcgcga tggaggcgga cacgggcagg gcgagcctga 120
tcctgtcggc ggggggtgtcg acgcggtacg tctactctgg gtaccagaaa accgccgcgt 180
cgacgcagga ggcggaggcc tgggaggcgg cgaagaaggc ctgcggcggg ctccacttcc 240
tgcccatcca ggagaacctc aactccgacg gctgcgtcgg cttctggctc ctgctggacc 300
tgcccccgcc gcctgtatga tggatggtct a 331

<210> 6589

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E7

<400> 6589

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aggcgccaca catggcatcc cagctctccg ccgcogtgcc ccggttcac ggctccggg 120

gctacgccgc gccaggtcc gcggtggcag cgctgccgtc cgtgaggggtg ggcaggaaga 180
 ggctgctgctc gcagggcatc cgctgcgact acatcggttc cgccaccaac ctgatcatgg 240
 tgacgacgac gacgctgatg ctgttcgcgg ggcggttcgg gctggcgccg tccgcgaacc 300
 gcaaggcgac ggcggggctg aagctggagg cgcgcgactc cggcctgcag acgggtgacc 360
 ccgccgggtt caacctcgcc gacacgctgg cctgcggcg 399

<210> 6590

<211> 342

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E9

<400> 6590

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 tatgattggt ctatttcttg cttattttgt ataccataat agtgctgcta tatacaatga 120
 tgattttggt taataaaaaa aacatatata gaagtgcag atgtaaagat atatgttctc 180
 ttctcaact agttcagtct gccagctaaa tttctttttt gattcatgat ttgtagagta 240
 aaatctttat ttttaattga tttcagttca aggagctcgc acaagcctat gaggttttga 300
 gtgatccaga gaaacgtgag atttatgatc agtatgggtga ag 342

<210> 6591

<211> 408

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-002-Q1-E1-F1

<400> 6591

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 cataagaagg acgaggagca ggaggagcag ctgcgccggc gcgggtacgg cgagtccgcc 180
 gagtacacgg aggccacggt gacggaggtg gtgtccacgg gcgagaacga gtacgacgag 240
 tacaaggagg agaagcagca taagcacaag cagcacctcg gcgaggccgg cgccatcgcc 300

gccggcgccct tcgcactcgt acgtagtcct ccgatcgatc cgatcctcct tgagtagtat 360
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 <211> 332
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 <223> Clone ID: LIB189-002-Q1-E1-F10
 <400> 6592

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 cacaaaaatg gccaaactaat tggaacccaa agtttgaaat catttatcgg agaagacaag 180
 ctgaaggaat ttattaactt cactcttcat tatattgctg acttgatat cccaattaaa 240
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 tgtagccaag aagaacgtga tgaatttgag aa 332

<210> 6593
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 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-F11
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 cggtgaggaa gggtaacaca ttctccgcc tgcaaccagt gcctatgaga tctgtttcct 240
 gcgctgccaa gaaggatacg gtggacaagg tttgtgaaat tgtgaagaag cagcttgctc 300
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<210> 6594
 <211> 351
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-F12

<400> 6594

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gtatctacta tcttcatcag gtacttcgcy atcctactga agtattcccc gccgccgtg 180
ccatggccac cctcaaccct ttcgaactcc tcggcgccga cgacaacgac gaccgcgcg 240
tggtgattgc ggccggcgcg gctgctgctc agaaagccga ggcaagaag tccgccgtgg 300
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<210> 6595

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-F2

<400> 6595

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cacaagttta ggagtgcag caacaagaga tctcgatggc ctctgccacc gtgctcaagt 180
cctccttccg tcccaagaag tccgaatggg gcgccaccag gcaggccgcc gcgccaggc 240
cgcccaccgt ctccatggc gtccgcgcct ccgcctacgc cgatgagctc gtgaagaccg 300
cgaaaacgat cgcgtcgccg gggcggggca tctgtcgat ggacgagtcg aacgcgacgt 360
gcgggaagcc gctggcgtcc atcggg 386

<210> 6596

<211> 356

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-F4

<400> 6596

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agctaagccc gtgccagcag ttcggatcct gcggcgtcgg cagcgtcggc agcccgttcc 180
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 cgccacagtg ccaggcgctg cagcagcagt gctgccacca gatcaggcag gtggagccgc 300
 tgcaccggtg ccaggcgaca tacgggtgtg tctgcagtc cttcctgcag cagcag 356

<210> 6597
 <211> 337
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-F6
 <400> 6597

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 ctggagataa gaccgcggga catcacgatg atgccttcag caccttcttc agccagactg 180
 gtgctgggaa gcacgttccc cgtgcaatct tcgttgatct agaaccact gtgatcgatg 240
 aggtgcgcac tggcacgtac cgccagctct tccaccctga gcagctcatc agtggcaagg 300
 aggatgccgc taacaatttc gcccggtggc actacac 337

<210> 6598
 <211> 405
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-F7
 <400> 6598

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 cctcctcctc gtctctaat acccttcgct tccctctccg ccgcgcagc gccgcccgcc 180
 ccatcgccgt caccgccttc aagaagctct ccgaggcgtc ccccggtgcc atccctcagg 240
 agcccaccga gcccctcctg gtcgacgagg acgctctgcc cccaaaggcc ggggtctacg 300
 gcgtctacga cccgcgcggc gagctgcagt tcgtcgggat ttgcgcgaac gtcagggcc 360
 gcatcgaggg ccaccgccgg aaagtccccg ccaacctctg cgctt 405

<210> 6599
<211> 362
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-F8

<400> 6599

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gtcccaatcc ccgtcgtcgc acacgccttc aggacaaacc caagggaaag cagattataa 120
atcactgagt gaagaggagt ggaagaagcg cctgactgaa gagcagtatt atgttactcg 180
gcagaagggc actgaaagag cattcactgg ggaatactgg aataactaaa cgccaggcat 240
ttatcagtgt gtctgctgcg acaccctctc gtttcagtca tcaaccaaatt ttgatagtgg 300
tactgggtgg ccctcctatt ataaaccaat tggtgaaaat gtcaagagca agcttgatat 360
gt 362

<210> 6600
<211> 326
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-F9

<400> 6600

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aggcagacca ttgactactc tcttcaaggg tcaagttgct gaggagaagg gtggaatcaa 180
gactgacgct tcctttgaaa caagcgttcc tggagtatat gccattggtg atgtggctac 240
cttccctttg aagatgtaca atgagttgag gagagtggaa catgttgacc attctagaaa 300
gtctgcagag caagctgtaa aggcga 326

<210> 6601
<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-G1

<400> 6601

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cgcgattcga cacagcagtc accctatttt cgggtgaaatg ctgagctgaa aggcgtcgtc 180

gatttcgtga tttcaagtcg gatttaattg acggtacgtg aattaaccac gtgatgcgga 240

agacgagcca agtcgacccc aagcgcgggc tactccgcat ggtgatgctg atggacgaac 300

ctgcctgata atgtgctagg acaaggatga tegtctaaca acactaacct agtgttaccc 360

aggcaagccc cgggtaagag tcac 384

<210> 6602

<211> 295

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-G10

<400> 6602

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gatatgttgt actatacact ctgatcgggg catgggtcac tgtctccgta gattctttca 180

ttcagactgg gcacttcttc tccccgcatg atgttatctc cccatcattc ttctctacac 240

catcttcggg accagaacca gttgcacctc gtgtgccac taactaatct tacac 295

<210> 6603

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E3

<400> 6603

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atttgagttc atcctagcga taccaataca cccatcccaa cactccaaac caaccaaac 120

ttcaaccaa ccaccacaac aatgccttca gtaaccaggg cccgtctcat gtggcgtagc 180

gtcgcccgcg gcatggtaga gccccacccc ttcgctcgca atcccatcac catgaccct 240

cacgcctggc gcgccgccga cctctccaag aaagtcgtga agacaagcac tgtcttcttc 300
cccttctatg caggtatcct tggatggcca gtcgcagccg cctggtgggt caacggaaac 360
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<210> 6604

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-C8

<400> 6604

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gaaaaactct tattatctta caatcagcta ggaggagcca taccaaattc agttgggaag 180
ttatccaaca acagccttca gtacctacga ttccggcagaa acaacttgtc gggagctgtt 240
ccggagagca tggggaacct tattgcctta aatacgttag atctagaaca aaacaatttg 300
aacggtctga ttggatcatg ggttggaag ttgaacaact tggttaagatt atctctttca 360
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<210> 6605

<211> 271

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-C9

<400> 6605

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atcaaccttc gtgagtttgt tgccatcgac atctagttca ttaaggcaag gaggaatacc 180
ttctcggatg gtacttatat ttgtgtcatc atcacggatc tactagacct tcttcattcc 240
ctgaacagct cccattttta atacctcacc t 271

<210> 6606

<211> 402

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-002-Q1-E1-D11

<400> 6606

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ctggtcctct gcttgcgcaa ctacatcagc tacttggttca cggagggcga ggtgggtgtcc 180
aacgcggtgg ccgatctctg cccgctgctt gccgtcacgc tcgttctcaa cggcatccag 240
cctgtgctgt caggtgtcgc cggtgggtgc ggggtggcagc agttcgtggc ctacgtgaac 300
attggctgct actacatagt cggcggtccc ctgggcgccc tgctcgggtt cttcttcang 360
ctccgtgtta agggcatttg ggctgggatg atcggaggga cc 402

<210> 6607

<211> 339

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-D12

<400> 6607

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atagccactc ctggcgctcc atacatgcta tgaaactcca tcagatgcgt gctgtgagct 180
caatacgtat aagttgtgct gccactaaac ctgcaaagac tcctgtgtga gaagaatgga 240
aagttaagcg gcaactgcta tcagaaaagc gggtagaag tgatgatgtg aaggaagcac 300
tgcgcttca aaaggaaaac aactttgtca ttctgatg 339

<210> 6608

<211> 369

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-D2

<400> 6608

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 aattatcgga aagcttcagg atggcgcggt gtttaciaag aaggggcatg acgaagagcc 180
 atttaaattc aagaccgatg aagaggaagt tattgccggt cttgatcgtg ctgtgttgaa 240
 catgaagaag ggcgaggttg ctctgtcac aattcctcct gaatatgcat ttggttcaac 300
 tgagtcaaag caggatcttg ctgtgttcc acctaacagc acagtaatat atgaagttga 360
 gcttaattc 369

<210> 6609
 <211> 378
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-D3
 <400> 6609

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 tcatggtaag acgacatatg gggtcgatat actcttatct tcaacgaatg gccccgcttt 360
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<210> 6610
 <211> 360
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-D4
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 gagcgaggat gggcgggcgc aacggtgaaa ccaccagct gggggagcca ctgctggcga 240

agaaggcgaa ggcgtatcgc cctaggtgcc cgggctgccg ggtggaccgc ctcaacgcgg 300
agcgggaggg tgtcttcctt ctcaaggacc tcttcctcat ctggctcgtc accatcacct 360

<210> 6611
<211> 404
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-002-Q1-E1-D5
<400> 6611

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atcctccttt ggaagttgaa tgatgaagta gatctattgt catggaatat aattgaggat 240
ggagtcatcc gctacctgaa atctggtggt ctactaattg gcaggacaat tgcagtattc 300
ttgacactga cactagctac atccctggct gcaaggggaag ggctgttcc aatggcgggc 360
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<210> 6612
<211> 300
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-002-Q1-E1-D6
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accggatccc ctttcccctg cgtgccggac tttcctccac tctccatcc atggtctctt 180
gctgctttta ctccctccc tggtcgcca tggtagtcgc gcccttgcca agtccctcc 240
gcgccgtggt gctccagctc ggctgcttc ccagctcgct cggccgaagc gcctgctcg 300

<210> 6613
<211> 408
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-D7

<400> 6613

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agagggacag gaagtggcag aaaaatgtat atggactcgg atcagcttcg ggacagaagg 180
aaaccttgtc caggagagaa aatccacggc cagatagagg gatgggtccac agtaacgaca 240
gcaaaacaat ttattacagg aaggggtggga cggaagtcca taatgttgat gaccaccctt 300
tagaaaagca agaccaccag gatacatcaa gtgacggatc taaaaagaga agccgaccag 360
tggacaacgc atctggtggc aacagaccat acttggtatga gaacaaga 408

<210> 6614

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-D9

<400> 6614

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gaggttggca atggttagcca tgcttggctt catggtgcaa gcatccgtaa ctcatgccgg 240
ccccatcgac aatctcttga cacaccttcc ggaccggtc aacaaaaata ttattcacac 300
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<210> 6615

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<223> Clone ID: LIB189-002-Q1-E1-E1

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ctgcataata ttgtttgtaa cgtaaagtct gaaagaggag ataagatata taagatgg 178

<210> 6616

<211> 350

<212> DNA

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<223> Clone ID: LIB189-002-Q1-E1-E10

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tggcacccaa ggcggagaag aagccggcgg ccaagaagcc cgcggaggag gagcccgcga 180

cagagaaggt ggagaaggct ccggcgggga agaagcccaa ggccgagaag cgcctcccgg 240

cgggcaagtc caaggagggc ggcgagggca agaaggggaa aaagaaggcg aagaagtccg 300

tggagacctt caagatctac atcttcaagg tgctgaagca agtgcacccc 350

<210> 6617

<211> 346

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E11

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<210> 6618

<211> 318

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E12

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<210> 6619

<211> 371

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-E2

<400> 6619

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<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-C7

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cggccttccc tacgaggcca acgaggagat gcttcgcgac gccttcgggt actacggcac 180

catcgtctcc gtcaaggatga ttaatgatca tgctgtcaaa ggcaagtgtt atggttttgt 240
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aggcaaccgt attgttcgag taaatgaagt gcgtacaaga ggcccccgag attttggccg 360
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<210> 6621
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<223> Clone ID: LIB189-002-Q1-E1-B1
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<210> 6622
<211> 330
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<223> Clone ID: LIB189-002-Q1-E1-B10
<400> 6622

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agggatgctc tcctaagtgg aaagtgtgac caggtagctg tcaacctgcc aaatggtgac 180
atggttggtc aactggtga tattgaggcc accgtagtgt cttgcaaggc agctgatgaa 240
gctgttaaga ttattttgga tgctgtcagc caagttggtg gtatttacct tgttaccgcc 300
gatcatggca atgctgagga tatggtgaaa 330

<210> 6623
 <211> 319
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-B11

<400> 6623

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tctaatacaga aaccctgct ctctcttcgc gttgagggtc cagtttcctt gtcctcgact 120
ccttccatgt ctccaagga caagctcaag ctcaaacggt tggccccagg ccaagtggag 180
ctctctcac aggcgggggc aatccctgct atcacgaag acgaggatga accacataac 240
cctggattgt ggctctttt gtctctgaat ggttcagatg gcagcctgca tgggtttgag 300
gagctattgg cctcagtac 319
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<210> 6624
 <211> 357
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-B12

<400> 6624

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atcgccatcg tggagcagtc ggtgtcgccg ggcggcggcg cgtggctggg cgggcagctg 180
ttctcgcca tgggtggtgcg caagccggcg cacctgttcc tggacgagct gggcgtggcg 240
tacgacgagg ccgaggacta cgtggtcatc aagcacgccg cgctcttcac gtccacggtc 300
atgagcctgc tcttggcgcg ccccaacgctc aagctgttca acgccgtggg cgtggag 357
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<210> 6625
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-B2

<400> 6625

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 cctttgaagg agctgcaaaa attgatgaga atccagtcac tgcgttgca tgcactgtat 180
 aaccatggcg ccaccaggtt atctgtaatt ccaattcatg catcgcgatc tcaggctcta 240
 aggtatttgt ctatttgcctg gggcatagag ttgccagatg ctgtgggtcat tggtgggtgaa 300
 actgggtgatt ctgattacga agaactgttt ggaggtcttc acaagacagt catccttaag 360
 ggtggattca acactcctgc caataggatt catacgggt 398

<210> 6626
 <211> 386
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-B3
 <400> 6626

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 tgctcgcaag ctctatagc ttcccttctt ccccgctacc tctcaccagc ggtgtcttcg 180
 gtatgtgaaa acccaattct tcaaccctac aggatccaac aggcaatcgc agctggcatc 240
 ttacctttat cacccttggt cctccaacaa tcatcagccc tattacaaca gttacctttg 300
 gtgcatttat tggcacaaaa catcagggca caacaactac aacaacttgt gctagcaaac 360
 cttgctgcct actctcagca acagca 386

<210> 6627
 <211> 406
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-002-Q1-E1-B4
 <400> 6627

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 gccgccagcc gctctccgc atcacgccgc tctactacat ggcgtccctt ccggcgacgg 180

aggagagatc cggaatcacc tggactaagc agttgaacgc gccgctggaa gaggtcgacc 240
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 tcccgtcgga gaatttcacg tcggtgtcag tgatgcaggc agtgggttcc gtcatgacca 360
 acaagtacag ccaggggtac cctggcgcaa gatactacgg gggaaa 406

<210> 6628

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-B6

<400> 6628

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 aacgacacgc cgctgtacca cgacaagctc gttagatttt acatgaggat gggtttcaaa 180
 gcagttcatg aggttgatgg atcatcaatc agtgatcttg gtcacatgtt ggtgtgggga 240
 ggtaggggta ctagaatgga tgctgatatt gaagagcttc ttattaagtg gggaaacaga 300
 ttcagactac aagactaaaa ggtggatggc aatactgata tgttttgtcg agacatgcag 360
 tttttgcagc atgccgcata caaatcttgt ttggatgcaa t 401

<210> 6629

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-B9

<400> 6629

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 accctgacct ggaggagacg agcaccgccc gcgaggccac cgtcgtcctc ggcgtggccc 180
 cggagaagaa ggccgcgccc gagttcgctc aggccgcggc ggagtcgggc gaggccgccc 240
 acggctgcag ctgcgggtggc aactgcaagt gcgaccctg caactgctga tcacatcgat 300
 cgacgaccat ggatatgatt attatctatc tagcttgtgg tgggtggtga acaattatta 360

gccaaaggccc acctggctgc catacatagg tattgtgtgg tgtgtgta

408

<210> 6630

<211> 344

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-002-Q1-E1-C10

<400> 6630

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ccattcttctt ccacatcccg gctttcacct cctctctcgt cgttggtccc ggaatcctag 120

ccggccgctg ggccgcgccc cgcgccctcc cgctccgcgc gctcccgcgc cgtcgcgtca 180

ccgtcgtctg cagcagcgcc gcggcggcag ccgaggcctc ggacgccgca gcgccagtgg 240

agaagttccg gctcgcacaat ttggggcccc agaaggggtc ccgccggcgg cccaagcgta 300

agggacgcgg tattgctgca nggccaggcg cgagctgcgg gttc 344

<210> 6631

<211> 326

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-C12

<400> 6631

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atgctaacat gcaagaaatg gacaaggagc tggacacaca cagggcggag catggtccga 120

agactcggcg agttcctgag gagggcggtat atgatgacga cgaagacgca gaggacatgg 180

ctgcggaaga cgaggtgatg gatgaagttc tgggcatcaa cgatgggatc aacgaggacc 240

catccaagcc gtccgaagaa gctactactg aaggtggtga gcctgcaccc gaggaagcac 300

aataggattc tttgttcaca caagct 326

<210> 6632

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-C2

<400> 6632

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cgccacctac ctgtccgata agatcgggta ctggaggtac atcaccatct tcaggcagct 120
caaggcgaac ccggagtacc aggtgtaccc catcttcaag tatttcgaga actggtgcca 180
ggacgagaac aggcacggcg acttcttctc tgccctgctc aaggctcagc cgcagttcct 240
caatgactgg aaggccaagc tctggtcacg gttcttctgc ctctcggtgt atatgaccat 300
gtacctgaat gactgccaac gactgcatt ctatgaggga attggtctgg acaccataga 360
attcgacatg catgtgatca atggga 386

<210> 6633

<211> 406

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-002-Q1-E1-C3

<400> 6633

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ttcccgggat gaaggggaga agtcactcaa ggaggcgtag aacctcgcg cgatggccgc 120
cttcgacaac ctcatcgcg tcccggccgc ggcccttgcc cctgccccgg ctgctccagc 180
gccgccctca tccgagacct agcttcctta caagagtcag ttacaaattt atgctcagaa 240
gcgaggcaaa ctctgcctt catatcgctc cattcatgga ggttctcttc atgcacctct 300
atttaagtca gaagtaacca tagatggtca aacatttgag agcccagagt actgtcacac 360
aatgaaggaa gctganacag ttgctgcaaa agttgctctg atgtcc 406

<210> 6634

<211> 309

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-C4

<400> 6634

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ttttgtacca gtagegaacg tttcattgtg attgaagtct tcctgcaaaa tattataaga 120
 tctaagaaag ttctatccgt gttggtgggt cagcagtga ttatctgcat ttggttcctt 180
 aggtagtcca tggatatctg aggtcccatt ttgtttgaat tgctgactgt caggtgtttt 240
 tgctgttggt ttggaataaa cttggcatgt agcttgccga aactggaata aacttgacat 300
 gcatcgtag 309

<210> 6635
 <211> 397
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-C5

<400> 6635

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 ttgccggcaa gcagctggag gatggacgca cccttgcgga ttacaacatt cagaaggaga 180
 gcaccctcca cctggtgctg cgctcaggg gaggaatgca gatcttcgtg aagacattga 240
 ctggcaagac catcaccttg gaggttgaga gtcgcgacac cattgataat gtgaaggcca 300
 agatccagga caaggagggt atccccccgg accagcagcg gctgatcttc gccggcaagc 360
 agctggagga tggtcgcacc ttggctgact acaacat 397

<210> 6636
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-C6

<400> 6636

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 gctgcctggc tgcgtcctgt gctgtagata cgagatcccg cagcgttcgt ttgttgact 180
 tgcaccggct tgctgctagc ttgcgacagg actaggagga gctagccgag gaggaggtgt 240
 gtgactocat ggacgcgggc cagcaggatg cgtgggactg ggactgggag gtcctgctgc 300

cataccacag gagtcctcc tccgtgcgcc accacggcag caagaataac cttgacgatt 360
aagaagaaac agacgagcac gaactgctgc ctccgccca 398

<210> 6637
<211> 312
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-A9

<400> 6637

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gtgcagcagc agcagcagca gcagttcttc atccgcgacg acacgccatt catgagccag 120
atgggcgaca tcaccagcac ggcggagttc aggttcggct ctggtttcaa catgtctagc 180
accgccgccc ctgattaccc aggcgcggcg cagaagaacg acggggccaa ttggttctac 240
tgaagaataa aacttgtagg gtcctcgtt ataagcttcg gattcctcca tggctctccc 300
aagttgtcaa gt 312

<210> 6638
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-H12

<400> 6638

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cggcgcggcg gaggccacac gccaccatc agtcagccgc cccgccacag ccatgcgcct 120
ccccgcggcg gcacgcctcg cgctcctgct cgcccgccgc tccctctcct cctccccccg 180
catcccgcgg gcgcacacag ggatatggag cgaggcgccc tcccgagct ctcccttctc 240
tccgcgagc agcgcgcga ggtccttcca cgggaccagg ccggtggcgg caagggacta 300
ctacgatgtg ctcggcgtca gcaagagcgc cagccaggcg gagataaaaa aggcctatta 360
tgggcttgca aagaagctcc atccagacac aaataaaggt gatgcggatg c 411

<210> 6639
<211> 422

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-H4

 <400> 6639

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 tccccgccgc cgcgaggacc accgcccga ccctacgctc cgctcgtccc tcccagggga 120
 tgcgctgctc gatgcgcaag aaggggttgc acccgagat ctacgaggac gcaaggtgt 180
 actgcaacgg cgagctggtg ctggtgacgg ggggcaccaa gccggagtac acggtggacg 240
 tgtggtccgg aaaccacccc tactatgtcg ggcacacctc ggcgctcgtg gtcattggaca 300
 gccagatcga gaagtccgc aagaagtggg gccacatcaa ggagtactgg cccgaggacc 360
 attggaggga gatgcacca gacggcgacc cggagtcca gcccgagggg gacaactgat 420
 tg 422

<210> 6640
 <211> 408
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-H5

 <400> 6640

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 gaggagaaag acggacgccc cgccgaggct ggacgaggca gatcgacgc tctactccac 120
 cttctgcggc gccgccaact ccctctccca gctctacgcg caggccatgg ccagcagaa 180
 gctcaacttc catgccggcg agcgccacgc cttagaaaag ctctaccagt ggatcttgag 240
 gaagcacgat gaagaggcta ggctcactgt ggctgaaata atgtctcata tccagcatga 300
 gatagactat gtaggtactg atgcacatgt ctcccaaga gtacctcagc atcctcagat 360
 tgcaaatcca ttcgccaatt cagttgtccc acctggaact ggtttgta 408

<210> 6641
 <211> 354
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-H6

<400> 6641

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acaagcttgc ataagtacca gtgatgactg cgctcgtaa ggttgctgat ctagccgtga 120
tgatcaccgg cgccgccgtc accgtgatct ccgtggggat aatcgggtctc gccaggaggt 180
ccatctgctg aatgaagatg gccgtcgcaa cggcgttggt gggcacgacg cgcaagcaca 240
gcgtagacgt tgtggtggac aactacggca acacgagcgt ctagtttgac ctgcagcaga 300
tcggaacgac catcggatag tgggagctct agagctcgga cgtccacacg ttct 354

<210> 6642

<211> 340

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-H7

<400> 6642

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gatttctctc catctacgac tacgatttga ttcattctgg gagtcttgat cgatcgacac 120
ttgttctgtt ctgtacagcg agtaacaacc gctgctgcta gctacattct ttactgtact 180
gtacttgtgt gatgacatca tatcttcgcg tcgctgttac tgaagaacta cacattgcac 240
taaggttgct ttcgtacgtg tacgtgctca tctttcttcc ttggaaatca ctcggtgtg 300
ccgccctttg caaaatgaag cgatcccttg tttttcttct 340

<210> 6643

<211> 412

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-001-Q1-E1-H8

<400> 6643

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tggagtggag caacggcacc gccttctgt tcgactccgc gtcctgccgc acattccagt 120
tcgccgtggg cctctgccc cccgactgga agggccgcgg cgccgcttac ctgnngcgcg 180

accgcgtcga cggttcgac tgccacgtct ggtacaactt cgtcttcgcc cgctactacg 240
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tgagcttcga ggcgggggca gtgctgctgg actcctccaa gtggcaggcg ccggttact 360
gctttcacan ncacaatggc agcagtgcc aacgcgccgc ttcgtcctcc tg 412

<210> 6644

<211> 352

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-A1

<400> 6644

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cagcagcgca ccccgatcc tcgctgtcg cctccatctc cattcgagg cctgagaccc 120
tcgcccgcac cgcgctgcc ccagccatgg gaatggggcc tctcgagaac gccgcgtcgg 180
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tgctgcagtg cggcgaggac tcggagtacg tcgggcagaa gtacggcggc tacttcgccg 300
tcttcgcgcg gctgctggag gaggacggcg agagctggcg cgtgttacgc gc 352

<210> 6645

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-A11

<400> 6645

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acctaattca gaggttttga acatcatcaa taccctttgc tcagatagta gaaacatcgt 120
ttttcttgtc agtggttagag acaaagatat gttaggaaag tggttctcct catgtccaaa 180
attggggatt gcagctgaac atggttactt cttgaggtag tctagcgaag aagagtggca 240
aacatgcact caggccatgg actttggatg gatgcaaagt gcaaagccag tgatgaattt 300
gtatacagaa gcaactgatg gatcctacat tgagacaaaa gaaagtgcct tgggtgtggca 360
ccatcaagaa gctgaaccaa ggctttggat cctcacaggc aaaggagctg cttgatcacc 420

t

421

<210> 6646
 <211> 346
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-A12

<400> 6646

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 cggggaaggg ctgcacaagg tgtaccccg cggcgccttc gaccgctgg gcctcgccga 180
 cgaccggac accgccgcg agtcaaggt gaaggagctc aagaacggcc gccttgccat 240
 gttctccatg ttcggcttct tcgtgcaggc catcgtcacc ggcaagggcc ccatcgagaa 300
 cctcttcgac cagtcgccg acccgtccc aacaacgcct gggcat 346

<210> 6647
 <211> 373
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-A2

<400> 6647

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 tccccacctc gtcttcgttc tgctcctacc aattccagtc ccagccatcc gcccgcccaa 120
 ctatggcggc aacggctctg ctactcccca gcctcgcggt gtcacggac acgccgcgcc 180
 gcgcccacag gttgctgcag ccgcagctcc agtccagcg cggctccctt gtctctcggt 240
 ccctccggcc tccgcggcgt cggcggctcg cggctctggc cgtgcaagag acgaacgacg 300
 gggaggccaa gacggccgac gagataaccg agaagtacgg gctcgagttc ggctctgga 360
 aagtgttcag ctc 373

<210> 6648
 <211> 410
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-A3

<400> 6648

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gtacggctat gatccaccat ttgctgctgc ccctattatt ccatctgata ctgatcattc 180
agtggcccag gtgttggtcg agcgtgctca ctttactgag atgttgaaag accagttggc 240
tgttgctcag aacaggatga aactcaaagc ggatcgcttg cggctctgagc ggcagttcca 300
ggtgggggat ttggttttgc tcaagttgca accatatgct cagcattcgg tggatgaaccg 360
accctgtccc aagctcgcgt tcacaatttt tggggccata caaagtgctg 410

<210> 6649

<211> 370

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-A8

<400> 6649

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ttgaagccag agaattttct cttcacaaca agagatgaaa gcgctcctat gaagttgatt 120
gactttggtc tgtcagatct tattagacca gatgaaaggc tcaatgatat tgttggaagt 180
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agtatagggtg ttataacata cattctgctc tgtggcagtc ggccattctg ggcaaggaca 300
gaatctggga tcttccggtc cgtattgagg gctgatccca attttgacga ttcaccatgg 360
ccttcagtat 370

<210> 6650

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-H1

<400> 6650

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agcgatctgc ctccgctccg gctcagctcc cgccttgctt ccgccttcca ttccgcgcgcg 120
 cggcgctgcc gagggccgac gtcgtccccg ccggagtttc tggtttctgg gttggatctc 180
 tcggagtcgg agcgagcgag gatggggcggc ggcaacgggtg aaaccaccca gctggggggag 240
 ccactgctgg cgaagaaggc gaaggcgtac cgccttaggt gcccggctg ccgggtggac 300
 cgcctcaacg cggagcggga gggggctctc cctctcaagg acctcttctt catctggctc 360
 gtcaccatca cctgcaccct gccgatccag tctctgttcc cttctttgta 410

<210> 6651

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-F5

<400> 6651

agatcgcccc ccccatctag tcgggtgctgg tgtggtgtgg gggcgggtgct gcgcgtgtgc 60
 gctcctctgt tcggcaggac tccttcaagc agaaggggag gagcagcatg gcggggcgct 120
 acgacggcaa ccccttcgag gaggaggacg tgaacccttt ctcggaacaa gcgcgcggca 180
 aggctggcgg gcagtccaac ttcggcgggtg gtgcgtttta catgcctaac accagaaaca 240
 tgcctcctgc atccaattcg cgcctttcgc cgcttctctc tgaaccagca gacttcagtg 300
 ctacagtgga catacccctg gactcgtcaa aggacctgaa gagaagggag aaggagctgc 360
 aagcaaggga agcggaattg aacaagaggg agaaggaact aaaa 404

<210> 6652

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-G1

<400> 6652

agtgtgacc ctgaaatcaa ggaggagggtg gtcgacagct cccttgaatt cctcatcctt 60
 gctagcgacg gactctggga tgtgtcact aatgaggaag ctgttgccat ggtcaagcct 120
 atccaggacc cccaggaagc agcaaacaag cttctcgaag aagcttcccg aaggggaagc 180
 tccgataaca tcacagttat catcgtccgc ttcataagac gaactaccgg tgagaaatca 240

ggcgacgaca aagagaccac caacgaccaa cactcctagc tgtctcgtgt agggatccat 300
 cgtgctgtgt gttcttctgg ctgttgtagc tgatgctcag agtagacgct ggctgctgct 360
 ccgcaaggaa actgactccc ccgaccgccg ttcattgctc tgctggctg gctc 414

<210> 6653

<211> 171

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-G10

<400> 6653

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ggaaaaaaaaa caaaaagata 60
 ataaaaagac atacacgtaa aagcaaatat actggaacat cgtcaacgtg cattaagtt 120
 aaagtcaacg gacgttcgtt ttacaacgtt tttcaatggc aataccctgg c 171

<210> 6654

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-G11

<400> 6654

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 acctgctgtt gaacagactc ctatatatga tgaagattta gctgtggaga gcattcttga 120
 tgcgttggag gttattgagc catcaaaact gtttgagcag ctacttggcg tcattctttc 180
 tgtatgcttt gtggcagctg aatcagtttt agcagcagat agcaatctgt caaaattatt 240
 ctacgattgc aaggactaca taattggcgt ttaccacaat gacatgtcaa aagatgagct 300
 agatgagatg tacaaggtgt acgagacgat ggaagccata gtaaccacc ctgaagaagc 360
 tctccagatc atggagcaac ctgatgagaa gtctgttgac aataaaaacc gc 412

<210> 6655

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-G12

<400> 6655

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cgtcttttga gaccactgtt gaagttgaag aaggaatgga gattgaccgc gggttatattt 120
ccccacaatt tgtgacaaac cttgagaaat caattgtgga gtttgagaat tgtaaggttc 180
ttattactga tcagaagatc acaagcataa aggaaatcct tccgattttg gagaagacca 240
cacagctgag agccccctctg ttcattattg ctgaggacat tactggtgaa gctttggcaa 300
ctcttggtgt taacaagctt cgaggaattc tcaatgttgc agcgattaag gctccaagtt 360
ttggtgagcg gcggaaggct gtacttcagg acattgccat cgtca 405

<210> 6656

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-G2

<400> 6656

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aaaccacat aatcgccaca atgcccata cgttcccca agctaccgag ctcaaggacc 120
tcttcagcct taagggcaag gtcgtcatcg tcaccggtgc ctccggcccc accggtattg 180
gcacagaggc tgcccgagga tgcgctgagt acggtgccga cctcgccatc acctacaact 240
ctcgcgccga gggtgccgag aagaacgcaa aggagatgag cgagaagtac ggcgtcaagg 300
tcaaggccta caagtgccag gtcaacgagt acgctcagtg cgagaagctc gtcaaggacg 360
tcatcaaagg actttcggaa aggtccatgt cttcatcgcc aacgccggaa agactgccga 420
c 421

<210> 6657

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-G3

<400> 6657

agcgaccacc tcgacggccg gccaatatag caacctatac agggcattct catctcatgg 60

cgacgacgga gacgatggag atgggcgctcg tcgtcgacgg cgtcagtagc aacgtatcag 120
 gcggctgcgg cgggctggtg gtgacggagc tgagccacat caaggagctg gtgaggcagc 180
 tggaggtgca cctcggcggc tccccggacc tgtgcaagca cctggcctcg cagatcttct 240
 cctcaccga gcgtccatc ggcctcatca actcctctc cagcggcctc gacggcgccc 300
 gccggaagcg ctccgcgggc gacgcgggcc tcgcctcgcc gctctcggcc acgcccacca 360
 gcggcgtcac cgacgggccc ttcaagaaca ccaagaagag gaaagcga 408

<210> 6658

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-G4

<400> 6658

aagttcctca agcaaccgga gacgaagctg ctggacatgc tggccaagca gattcaaggc 60
 atcaaggctca tgacgaagct ggacatcctc tcgtcgact cgcccgacga ggagtacatg 120
 ggggagttcg cggagccgtc gtggctggcg gagcccatgg tgaaggcggc gttcgagaag 180
 ttcggcgcca ggatgaagga gatcgagggg ttcacgcacg agtgcaacaa caacctggac 240
 ctcaagaacc gctgcggcgc cgggatcgtg ccgtacgagc tgctcaagcc cttctccaag 300
 ccgggagtc cggggagggg catccccaac agcatctcca tctgatccat cctcagcatg 360
 cattagtcca attaatataa tcgggggttg t 391

<210> 6659

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-G5

<400> 6659

agggccgtgg agaaggtggc caagcgcatc atgggcaagg aggtgaacac cgcggtgccc 60
 tccggggaga agacgccgtg ggtgccggac ccggtcaccg gctactaccg cccggcgggc 120
 ggcgccaagg aggtggacgc ggcggagctt cgcgccaggc tgctcaccaa gaggatcgcc 180
 aactaaatca atctagcagc agagcagtcg ggctgagatt atttagcgcc agttgatctc 240

ttgggcctag agcatgacgg tgctgtaact tttagggcat aatatatata gatagataga 300
 tgggaagagc tcgaacgtat ctccgtttct agaaagaatg gcgcaattct tgctttgctt 360
 tttaacgagt caatttgtct tgactttacc atattgtata cgaaaatgta cta 413

<210> 6660

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-G6

<400> 6660

agcccacgcg tccgcccacg cgtccgccc cgcgtccggg cgtccccagc cgttcatgaa 60
 ccccataaat ggcctatatt ctacgcccgc tatttgcacc tctgtcagtt aagggtcattg 120
 cgttatcgaa gacctgcaat attttgggag atggaccttt gcctttgcct ttgcttagag 180
 gattggtatt tggtagcaga gattttctct atccaagtga gttgtgagca gcgagcattt 240
 agtcaaactg tacaaaagtt ttccgggata ccctttttgt aataaaagaa actgatgtat 300
 tccgcagtag ctgtagcgcg ggatataatg ttcctttgta tgttatatat gacagaatca 360
 tagggaaata acagatgtaa agttaatcca aaaaacaaag aaagaaagtg gg 412

<210> 6661

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-G7

<400> 6661

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 cgtacaaggt ggccgcgagc gccgcccgcg ccggcacccc ggtgacgggt accgtggagc 120
 cgtcgacgct gagcttcagc agggccggcg agaagcagag ctacacgggt agcttcacgg 180
 cgggcccggat gccgtcgggc accaacgggt tcgggcccgt cgtctggtcc agcgaccacc 240
 acgtgggtgc cagcccgatc gcggcgacgt ggacctaatg gctagcggcg gccgtaccgt 300
 agcaatagcg agataaaatc ccgattgggg gacggcaatg gcgagcgcgc gccattctcg 360
 aatgcgagag agatggcggg tatcgtcgag gatgtgctgt tgtattgtgt gc 412

<210> 6662
 <211> 344
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-G9

 <400> 6662

 aagttatctg tccgccaaga taatttgaat gattcagggg atggtggaag agccccagta 60
 ttcaaattggt tctccgtatt agaatttggg gggtaataca tctcttgctt ctatggatta 120
 agtcaccact atgatctttc gtctgttggg tgtgacaacg atctcctaac ccatctatat 180
 ctgagactac tcagagcact atatattctc acatttgaga atgccgatca atatctgaga 240
 cagtacacac attcatgtat acatgtgtca tatccacatt agaaatatat attatgtttc 300
 cattagtcac ctcagagagt cttgcccagg agcttgttca gatg 344

<210> 6663
 <211> 385
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-F4

 <400> 6663

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 taacttcctg gaggtggttg acctgtggcg gataaggctc gtaaaccctg ggttgggggg 120
 caaaacctta accaaaagtc aattaaagaa aattgcaaaa ctgaaaaggt aatgtgcaaa 180
 aaaggagtg aaccccgga ttgaggttga tgggtggtgtt ggtccgaaaa atgcctacaa 240
 gggtattgaa gctggcgcaa atgccattgt cgcaagttct gcagtttttg gggctccaga 300
 ctacgctgaa gctatcaaag gaataaagac cagccaaaga cctctagctg tagccgcata 360
 aagagctgga cgtgtaatca ttac 385

<210> 6664
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-E1

<400> 6664

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ccgcaacggc gacggcacc agacgccacc gccgcacgtg gcgatgcttg cgacgcccg 120
gatggggccac ctgatcccg tggcggagct ggcgaagcgc ctggcccagc gccacggcgt 180
cacgtccacg ctcatcacgt tcgcgtccac ggcgtccgcc acgcagcgcg cgttcctcgc 240
ctcgatgccg cccgccgtcg cgtccatggc gctgccgccg gtggacatgt ccgacctccc 300
gcgcgacgcc gccatcgaga cgctcatgtc cgaagagtgc gtgcgcgccg tgccggcgct 360
caccgaagcg ctctgagcc tcaagcagcg gccaccacg accggccgct tcg 413

<210> 6665

<211> 219

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-E10

<400> 6665

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ccagtgccta caccgaggcc tgaacctaa accgaacctt tgccagagcc taagcctgaa 120
tctaagataa gttcagagct aaagcctgaa cgaaaaccag agcctatgcc atagcataga 180
cctgaggcag tgccagagcc caaagctaga ccgttccca 219

<210> 6666

<211> 387

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-001-Q1-E1-E11

<400> 6666

acgcaaccct gatgtatggg acgacctct tcgcttcgac cccgaacgcc acatcccttt 60
gagccccgag atggaggtct cactcggtga gcgtgatcta cggtttatct ccttcagcac 120
tggtcgtcgc ggctgcatcg ctgcagctct tggcactgat atgaccatca tgctcttcgc 180
taggtccttg caggggttct cttggagcaa gatgaccggg gtggcggcca tcgaccttag 240
cgagtccagg cacaacactt tcatggcacg ggcactcgtg ctacaggcta agccacggct 300

tccagcgcac ctctaccccg ggatcttgct ttgtaagtag tcncaaataa cggctgagca 360
 tgtagaaaat ttcaccactt atacatg 387

<210> 6667
 <211> 413
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-001-Q1-E1-E2
 <400> 6667

cggacgcgtg ggggtgggcca cgccctggtc cgcactgcc gagaacttcg ctaacttcac 60
 cggcgagcag ggctaccccg gcggcaagtt cttcgaccg ctcggcctcg ccggcaccgt 120
 caaggacggc gtctacatcc ccgacgtcga caagctcgag cggctcaagc tggccgagat 180
 caagcacgcc cgcacgcga tgcttgccat gctcgccttc tacttcgagg ccgggcaggg 240
 caagacgccg ctcggcgcg ctcggcctatg atttgcatgc tgccggcgaa cgagtcagtt 300
 ctcgattgcy tgggggtgggt gagctcctag ggacgtacgg ctgcagcgga tcagacgcct 360
 tgcctcgcag attggaggcg anagaagagc gtagcagcaa tctactgtct gtg 413

<210> 6668
 <211> 413
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-001-Q1-E1-E3
 <400> 6668

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 tagtagtatt ttaattaact attgtgcggt tggagctaaa caagagaaaa gctaccagca 120
 tgggtggccaa aggaacagat atgttgtcat ctacaacttc gggtcacagga acgcactcca 180
 ctactgtcgc tgctagtgc aaaaacgcca gcttaccaag tgcctcttcc cagataacat 240
 caatgtaacc caggcttgag aagtagagca tcatcatcgc ggacagcagg aaaccagaaa 300
 tgaacatcga gatgctcccg gccagctct tcttcogatt gaatggcagc ttcgctgagc 360
 catacctcct cccaacaatg tcagcanaac catcgccacc gctcatcatc gac 413

<210> 6669
 <211> 349
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-E4

 <400> 6669

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 ttgtttttga catgccaatt gctgagttct gacttggcaa ggttgagcat aagtctttct 120
 tcatttgga gttatcacag agccagtttg gcagtgtgt agttttggtt ttacctactc 180
 tttgtagaag aaaagtgaag agtggatatt atggaacaaa atatatacct acggcagcac 240
 gcagcatgat gaaacatatt taaaaaattt ggggtgctcta ccacatgccc gtggaataaa 300
 acggatgtaa actcagtga aaaaaaaaaa aaaaaaaaaa aaacaaaaa 349

<210> 6670
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-001-Q1-E1-E5

 <400> 6670

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 caggcgccga tctaaagacg atggccgccg cgggctctc gccgtccttc tcctcctcga 120
 gtaagegact ggaagggaag gtggccctcg tcaactggtg cgccaccggc atcggcgagg 180
 ccatcgttcg cctcttcag gagcacggcg ccaaggtctg catcgcgac atccaggatg 240
 aggcggggca gcagctgcgc gacgccctgn gaggtgacgc gcaggcgcc atgttcgtcc 300
 actgcgacgt gacgtcggag gaggacgtga gccgcgccgt ggacgtgcg gcggagcgg 360
 tcggcgact ggacgtgatg gtgaacaacg ccggcgtgac gggcgccaag g 411

<210> 6671
 <211> 410
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-E6

<400> 6671

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ccagctcaag aaagagatgg ctgcctcgca gaatcgaaag ttagtgcagc ctccagaagg 120
gacattcttc taacgaagtg ttcacttggc ccgtcatggg atccaacagt aattgaaagt 180
tttatgggct aaaaaacagc gtctacatct ggtgcccctg cctgtctttg tgatttttta 240
tgacttttat gttcttgtat cgtgaaccgc agtgaacaac ggttggttga agttccaggg 300
atatcttttg aagtggtaaa caaatgcgtc ttatttctat gtaatattag acccctgctg 360
tgtgtggttt cgaggtacag ctccctatca actgttgccg tgcattccgt 410

<210> 6672

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-E7

<400> 6672

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ggcttcgata gaatcgaatc ggatcggatc ggaagcatgg agatctcgct cgaggcgctc 120
tgggtgggag tgcagcggca cgggcaggac ctggcggacc gcctcgcgca gggcttctcg 180
gggtcctctc tccacgcgca gccgcgcag ctgcccccat ggtcgcgggc ggcgctgttg 240
ccgccaagc tcgtcatccc cttegacctc gacctccccg ttgtcccctt cgtcgccggg 300
atgcgcgcgc gggtcgggac cgtggacctc cccgcgctgg ccgtctcgct gctcgtcgag 360
atcggcggca ggctcgggca agcggggtcc gagctcggtg 400

<210> 6673

<211> 388

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-E8

<400> 6673

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cgccccggtc gcagccctgc gcccgtcgtc gtcgtcggcc ttccttggcc actctagcog 120
cctcgggccgc actgctaccg cgtcgcccgc gaggcggagc ctcaaggcgg aggccaaggg 180
cgagtggctc ccgggccttc cctccccgcg ctacctcgac ggcagcctgc cgggtgacaa 240
tggtcttcgac ccgttggggc tggcggagga cccggagAAC ctgagggtgt acgtgcaggc 300
ggagctgggtg aacgggcggg gggcgatgct gggcgtggcc gggatgctga tcccggaagt 360
gctgaccaag gccgggctga tcaacgcg 388

<210> 6674
<211> 411
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-001-Q1-E1-F1

<400> 6674
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gcgccatgct gctcgcccc ggccagccg tcgccgccgt cgggagccgc tccgaagtga 120
aggccccgct cttcgccgcc gacaacggcc tcgacgtcgc caccaccgcg ctccacggct 180
cgtacgatgc gtcctcgac gaccggaca tcgacgccgt ctacatgccg ctccccacca 240
gcctccacgt gcgctgggct accgcagccg ccgcacgtgg caagcacgtg ctcttagaga 300
agccccaggc gctgtgcgcc gccgacctg acaccatcct cgcggcttgc gacaccgcgg 360
gggtccagtt catggactcc accatgtgga tgcnacacc gcgcaccgcc a 411

<210> 6675
<211> 222
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-F10

<400> 6675
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acagtttaca taattgctga ctcaaggta gctaacaggt caatcatggg cgaaagatgt 120
acaagtgacg aatgaacgcg tcagtcagat cataatgcat atgagtcctg accacacggc 180
gatccagttc atgtgggttt gggaagagtt cttctacatc at 222

<210> 6676
 <211> 400
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-F11

 <400> 6676

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 accatggcgt ccctctcctc tgccgccatc accgcccctt ccttcacggc cgcgcccgt 120
 cgcgcagtgg tcagcaggag gtccttcacc gtgctgtcct ctctccgcaa ggccactgcc 180
 accgcccggc tggccgttgc cgccagcgtc ctgcttgccg gcggcgggcg catggcccag 240
 gaggtgctgc tggggcgcatg cgacggcggg ctcgtcttcg agcccagcca gttcaccgtc 300
 aaggccggcg acaccatcac cttcaagaac aacgccggct tcccgcaaa cgctcgtgttc 360
 gacgaagacg aggtgccgag cggcgtccac gcctccaaga 400

<210> 6677
 <211> 418
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-F2

 <400> 6677

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 gaaggacaag ctgggcaacg acatcacggc ggaggcgtgg ctcaacacgc acggtcccaa 120
 cgaccgcacg ctgcgcgagg ggctcaaggg tgacccacg tacctggtgg tggagcagga 180
 caagacgctg gccacctacg ggatcaacgc cgtgtgcact cacctcggct gcgtcgtgcc 240
 gtggaacggc gccgagaaca agttcatctg cccatgccac ggatcccagt acaacaacca 300
 gggcaaggctg gtccgtggac cggcgccctc gtcgctggcc ctgggttcacg ccgacgtcga 360
 cgacggcaaa gtcctcttcg tcccggtgggt ggagaccgac ttcaggaccg gcgaggac 418

<210> 6678
 <211> 391
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-001-Q1-E1-D9

<400> 6678

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gcacaagcca tggcggtccat gaccggcctc tcgcagggcg ttctgcccag caggcgcgcc 120
gccaacaggg ccaggacggc gcgcgtcgtc agggcggtccg ccgaggcgca ggcgcaggcg 180
caggcgggcc gccgcgccgt gctcgggctg gtggccactg gcatcgtcgg cggcgccctg 240
tcgcagggcg tgcacgccga gaccgtcaag accatcaaga tcggagcccc gccgccgccc 300
tccggtggac tccccgggac tctgaactct gaccaggcga gggacttcga cctcnccttg 360
aaggagcggg tctacctgca gccgctgccg c 391

<210> 6679
<211> 410
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-C3

<400> 6679

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caagtctgca ggaaaggatg ccttcacact tcgggtccgg gttcacccct tccatgtcct 120
tcgtatcaac aagatgcttt cgtgtgctgg ggctgatagg ctccagactg gaatgagggg 180
tgcccttggc aagcctcagg gcacctgtgc taggggtggac attggtcagg tcctcctttc 240
tgttcgatgc aaggacaaca atgctgcaca tgccagtga gctctgcgtc gcgccaagtt 300
caagttccct ggccgcaaaa agattattga gaggagaaag tggggcttca ccaagttcag 360
ccgtgccgac tacctgaagt acaagagtga gggtagaatt gttcctgatg 410

<210> 6680
<211> 405
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-C5

<400> 6680

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 gcaggcaacg agattactca agatagcctt aagcgagatg atttgagcag tttgaatcca 180
 cctgtgatgg aaggtttgga tgccctactt gcgaaatcta agcatttggt gaagcgtggt 240
 gatccagaaa tggatggata tcctcaggaa caatctcctt taacaaacaa atggtttagc 300
 tcaaagtcac caaagaagat acctctgact gccgtcactt ctgttatcga tggcttgaaa 360
 aaactttata tcgaaaagtt gaagcctttg gaagttacat acaag 405

<210> 6681
 <211> 411
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-001-Q1-E1-C6

<400> 6681
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 ttcaaccacc acaagaagga cgaggagcag cccgccggcg agtacgggta ctccgagacc 180
 gaggtggtca ccgccaccgg cgagggcgag tacgagaggt acaagaagga ggagaaggag 240
 cacaagcaca agcagcacct cggcgaggcc ggcgccatcg ccgccggcgc ctctgcactc 300
 tacgagaagc acgaggcgaa gaaggacccc gagcacgcgc acaggcacia gatcacggag 360
 gaggtcgctg ccgcngcggc cgctcggcgc ggcggtacg tattcgacga g 411

<210> 6682
 <211> 410
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-C7

<400> 6682
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 ttctctgggtg atcgccacia ccggttctct tgcccgcgcc gcacgcccgt caggcaccgc 120
 gcctcggacg ccgacagggt cgcggtgcctc gcgtgtgatc tcgacgagat ctactccgcg 180

gccttcaacg gggaccgcac gccatacagc cccgcccaagt ttctatatag ttggtggcag 240
catgcatcaa accttgcaag ttacgagcaa caggatgctc atgaattctt tatttccatc 300
cttgatcata tccatgaaaa tataaaggat gatcaacaaa agtcatatgc ccaaggccat 360
ggggattgtt gcattgctca cagagtgttt tctggtatcc tgaggtcaga 410

<210> 6683

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-C8

<400> 6683

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gaggagaaac tccggccggc gacgcggggg aaaatgggga agacgccggt gcggatgaag 120
gcggtggtgt acgcgctgtc gcccttccag cagaagggtga tgccggggct gtggaaggac 180
atcaccacca agatccacca caaggtcacc gagaactgga tctccgccac gtcctcctc 240
acccccgtcg tcggcaccta ccaatacgcc atgtggtaca aagagcagga gaagctttcc 300
cacagatact aaatgggatg tcctccaagt tgctgcggtc tgctgcagtt gaattttcca 360
tgatgggttg tataatctgt caatgtcatt tctttgctca gttttagtgc aaccatt 418

<210> 6684

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-C9

<400> 6684

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tgggacgtgc gtatcgacgt ggaggccgct agcggtcggt tcagagcact tttcctctag 180
cctgagctcc agtgggactt catgctgcct ctggtgaaga ggatcaatgt cagcgggcac 240
aagtacggcc tcgtctagcc tgggtgttggc tgggtcatct ggcggagcaa ggatgatctg 300
cctgaggagc tcattctcca tatcaactac ctggggacgg accagcctac gttcacgctc 360

aactttctcca aaggttcttg tc

382

<210> 6685
<211> 413
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-001-Q1-E1-D10

<400> 6685

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aagcaagaca catcaagatg cgtgctgccc tgagggtatg tgcagggtg cagtgtttgc 120
gctgcatgta aaggaagagc tgaactcatg gcctgagcag agcaccggc agaggacctg 180
actcacggtt cctgaagctg catccacgtg ccggtaccag tggatggaag aggccttgct 240
cacaggcttc tctgactggc acgacaagtg gagcataggt gacggcggtg gcggcggtgc 300
caactgtgtg acccggccta actgctgatg aacctatctg cagtcgtcca atttgtccat 360
cctncccat ttcccctaag ctccgacatt gcgtaacgca ataaatacag tgt 413

<210> 6686
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-D12

<400> 6686

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ctgcggtgc tgatgggat ggagcggcg gcggcgcccg cctcggcatt gcctcggggc 120
ggcgcgcgcg gcctgatgat ggtgcagcac gtcctcctcg acgtcaacgg ggaactgttc 180
tcggcgggg tcggcgcgcg cggcgtgccg ccggcgctga aggcgcgat cgccgcgtg 240
aaggaggtga aggcgggga gggcgaggac gcgcttgcg agtgcgccat ctgcctggac 300
gcggtggagg gcaccggcaa ggagatgccg tcggggcact gcttccacgg gcgctgcctg 360
gagcggtggc tcggcggtgca cggcaactgc cccgtctgcc gccgcgagct g 411

<210> 6687

<211> 415
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-D2

 <400> 6687

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 ttaggtttcc ttcggttggga atcacctacc actatctaca gtgaactcaa gtctacattc 120
 tggcccatgc ttaccgctgg atggaagttg tggccttttg cacacttaat tacatatggg 180
 gtggttcctg ttgagcaaaag acttctatgg gtcgactgtg tggagcttgt ctgggtcaca 240
 atattgtcga cgtactcaaa cgaaaagtca gaggcaagga attctgatag cacctccaca 300
 ccagatgctt caaaggacaa ctccagatag cagccctaga gaccttggag agctgattcg 360
 tccttccatc gcttcagttt atgtaaattg tacaattagc tgcagcaact ctgca 415

<210> 6688
 <211> 448
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-001-Q1-E1-D4

 <400> 6688

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 gaaagtggcc ttcgagcaac actaaacctg ggtcacacat ttggccatgc tattgagact 120
 gggacaggat atggagcatg gctccatggg gaggtgtcg cagctggaac agttatggca 180
 actgacatgt ctaccgcct ggggtggata gatgactcca tcagaaaacg tgtggttgac 240
 atactaaagc aagccaaact tccattgca cctcctgaga ccatgaccgt agagaagttt 300
 aaaaacatca tggctgttga caagaaggtt gctgatggc tgttgagact catccttctg 360
 aaaggaccgc tanggtgctg tgtatttacg ggggattatg acgggaatgc actcgatgaa 420
 acctacatgc attctgcgac aactgaga 448

<210> 6689
 <211> 405
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-D5

<400> 6689

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ccgtcaccgc ccgcgccccg gtcgcagccc tgcgcccgtc gtcgctcgtc gccttccttg 120
gccactctag ccgcctcggc cgcactgcta ccgcgtcgcc gacgaggcgc agcctaaagg 180
cggaggccaa gggcgagtgg ctcccggggc ttccctcccc cgcctacctc gacggcagcc 240
tgccgggtga caatggcttc gacccgttgg gcctggcgga ggacccggag aacctgaggt 300
ggtacgtgca ggcggagctg gtgaacgggc ggtgggcat gctgggcgtg gccgggatgc 360
tgatcccgga ggtgctgacc aaggccgggc tgatcaacgc gccgc 405

<210> 6690

<211> 395

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-001-Q1-E1-D6

<400> 6690

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gatgaaatag agaaagctca tccagatatt ttcaacattc ttctccaagt atttgaagat 120
ggacacctga cagactcaca aggacgcaga gtttccttca aaaatacgtt gattgtcatg 180
acatcaaagt ttggttcaac atcaatctca agcgggaagga ggagtatagg tttctcaaca 240
caaagggata cagaggagac cacctatgct gcgatgaaat cacttgatgat ggaagagctg 300
aaggcatttt ttcggcctga attgctcaat agattggatg aagtggttgt attccaccct 360
cttgaaaaga nccagatgat ggctattctc aacct 395

<210> 6691

<211> 405

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-001-Q1-E1-D7

<400> 6691

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 gacaggaagg cctcgcagat caaagttctc cccttccatg ctgcgctgga tcaggcccag 120
 cgcacgcaa acatcaagga gttcctgaac aagcaaacgg ctgactccat gttccttgtg 180
 tgcacagata gggcgctcgcg gggcatcgac tttgcgaacg tgaaccacgt ggtgctcttc 240
 gactaccccc gcgacccgag cgagtacgtg cggcgcgctc ggcggaactgc ccgcggcgcg 300
 tccggcaacg gcaaggcggtt cgtgttcgcg gtgggcaagc aagtgtcnct ggccaggagg 360
 gtgatggaga ggaacatgaa ggggcaaccg ctgcacgacg tgccg 405

<210> 6692
 <211> 417
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-001-Q1-E1-C2
 <400> 6692

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 ggtcgctgcc atgcgtgctc etcctcctcc tcctcgctgt cttccaccac ggctgctcgt 120
 cggcgagggc ccacagacgt gccggcgaca tggaggggag catgagcacc gacgacagct 180
 cgatgataga gcggttccag cgggtgaagg cggcgtaaca caagtcctac gccacggctc 240
 ccgaggagcg gcggcggttc cgggtgtacg cgcgcaacat ggcgtacatc gagggcacca 300
 acgccgaggc cgaggcggcg ggggtcacgt acgagctcgg cgagacggcc tacaccgacc 360
 ttcacaacca ngagtttcat ggcatgtaca cggcgcccgc gccggcgag ctgcccg 417

<210> 6693
 <211> 408
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-B10
 <400> 6693

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agctggccac caaggcggcg cgcaagtctg ccccggcgac cggcggagtg aagaagcccc 180
accgtttccg ccccggcacc gtcgcgctcc gggagatccg caagtaccag aagagcacgg 240
agctgctgat ccgcaagctg ccgttccagc gcctgggtgcg tgagatcgcc caggacttca 300
agaccgacct ccgttccag agctccgccc tcgccgcgct gcaggaggcg tccgaggcct 360
acctcgtcgg gctcttcgag ggacacaacc tctgcgccat tcacgcca 408

<210> 6694

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-B12

<400> 6694

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tgtcttgcaa ctgcggatca agctgcggct gcggctcaag ctgcaagtgc ggcaagaagt 120
acctgacct ggaggagacg agcaccgccc cgcaggccac cgtcgtcctc ggctggcccc 180
cggagaagaa ggccgcgccc gagttcgtcg aggccgcggc ggagtcgggc gaggccgccc 240
acggctgcag ctgcgggtggc aactgcaagt ggcaccctcg caactgctga tcacatcgat 300
cgacgaccat ggatatgatt attatctatc tagcttgtgg tgggtggtga acaataataa 360
gcgaggccga gctggctgcc atacataggt attgtgtggt gtgtgtgaga gagagag 417

<210> 6695

<211> 417

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-001-Q1-E1-B2

<400> 6695

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caagcgtcgg caccaatggc ttactaccag gaggtggact actgctcgga ggaggtgagg 120
tcggtggccc cggccggctt cggccgccac ggcggcggcg tccagcagca cgtcgtcaag 180
gagaagttcg aggaggtcga cacggtctca cgcgcggcg ccaaccacca ccaccacct 240
ggtcaccaca gcggccacgg cttcgtggtg cgcgagacca gggtcgaaga ggacatcaac 300

acctgcaccg gcgaggtcca cgagcgcagg gagagcttcc tcgccagggc taactgagcc 360
 gcncggcggc cggcatccac gcccgttcgt gcttgccctgc gtgccttatg tatgtct 417

<210> 6696

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-B3

<400> 6696

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 ctaccttgcc aacgcataaa cgagaagacg ggtagactt tgttgaaacc ctcttcaacta 180
 gtggaggtat cgaccatcac tcgtcactgt aacctgatgg tgatcggcga ccgtgagctt 240
 tcatgttatt gtgttttgat acttgagaca ttattatga ctatgtatgt gatattgtct 300
 cttattagta ctggatgaga tgtgtcttat tatgactatg gatgagactt ttatgatgta 360
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<210> 6697

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-B4

<400> 6697

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 agggcgagcc tgagcgtgat ccccggcgag cgcgccatcc agtgcgcgca atgcaactgc 180
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 atgcgccaag gctgtggcga cctgaggggc cccgtcaacg acgtcaagtg catgaggaac 360
 ctctctgcc agcgttccgg cttccccggc gaatgcatca tcatgctcac tgacg 415

<210> 6698
<211> 396
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-B5

<400> 6698

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atcgagggag caaatcactg ctacactgct caccgtagag aactttctga tgccgtagta 120
gaagccatca catccagtga ggcaggggag accacaacct agatctgatg cagaacggca 180
gctgcctttt ccaatcctgc aatgccgctc ttccatctca gtcacattgc cttatcacia 240
tttttaaaag aaaacgagtt ctttgaat atcgtttgaa tctagacgtt gttaactcgt 300
tgtatcatga catccttaat gctacgtttg gacgttgata ttggagagta tgaaattgaa 360
ttgggttgaa tatcaaatca gacatgatag tgaaaa 396

<210> 6699
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-B6

<400> 6699

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agtcttcttc acaagtttag gagtgacagc aacaagagat cgatggcctc tgccaccgtg 180
ctcaagtcct ccttccttcc caagaagtcc gaatggggcg ccaccaggca ggccgccgcg 240
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aagaccgcga aaacgatcgc gtcgccgggg cggggcatcc tggcgatgga cgagtcgaac 360
gcgacgtgcg ggaagcggct ggcgtccatc gggctggaga acac 404

<210> 6700
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-B8

<400> 6700

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gtggttgaag caaaggcggg aaaaggctct gcaacgttgt ccatggcata tgctggtgct 240
gtttttgcag atgcatgttt gaagggtctg aatggagttc cagacattgt agagtgtctt 300
tttgtgcaat caactgtgac agagttgccca ttctttgcct ccaaggttcg gctcggcaag 360
aatggagtgg aggaagtgtc tggctcgggt gagctcaacg agttcgagaa gaagg 415

<210> 6701

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-B9

<400> 6701

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tcggctccgc gtcctcaag atgctgctgg aggacggata cgccgtcaag acgacggtca 180
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gcgactacgc ctctctcgtc gccgccccgg tgaacctctc ggcacaggat ccagagaaag 360
agcagatcga gccgtccgtc cgaggcacgc tgaacg 396

<210> 6702

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-C1

<400> 6702

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cccttcgtcc tcggacgcgg ccggccgtgc ccgtcttcgg gctgcggagg aacgggaacg 120

ggaacgccgg cccggcgggtgt acacgggtgtg gaagagggtcc agcatgggat tccagggcac 180
cgacggcttc tgcgtgtacg acgacgccgg cgggctcgcg ttccgcgtcg acaactactc 240
ccgccgccgc aagctctgcg cgggcgagct gctgctcatg gatggcacgg gcacgcctct 300
cctctccctc aggccacagc ttctcagcct gcacgaccga tggaactgct acacagcgac 360
ggaagacgcc gccgtcgaca agaaggccac gtcgccggcg cagcagcaag 410

<210> 6703

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-C11

<400> 6703

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gaacggcaag gagctggacg gccgcaacat caccgtcaac gaggcccagt cccgcggcgg 180
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ctacgggtgt ggtggcgggc gctacggcgg tggcaaccgt ggccggcgct acggcaactc 360
cgacgggaac tggaggaact gagcgggtgg g 391

<210> 6704

<211> 411

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-001-Q1-E1-C12

<400> 6704

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caccgggttc cacgtcccag ccagcgcagc tcaggttaac acggggaaat ggctagacga 180
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ggaggcgatg gtggatgtca ggcgcacacg tgccgctaac ctgaagctgc ggactctgga 300
cgatctggtc aggggaactgg acagcgacat ccagtctctc cacgtcncga ggaaaattca 360
gcaacggggg gatgaccaca gcacagctga gaacctgagg atggctctcc g 411

<210> 6705

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-A9

<400> 6705

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ggcatcaggg cgctctcttc cctcaaggtc ggcgcgcccg acaacttcca cttcgtggag 180
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ctcaacagct accccttcgt caatgaaggg ctggccggcg ggacgctcaa gctgggtggc 360
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<210> 6706

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-A1

<400> 6706

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ggccggaggt ggtgggagga cgccaaggcc aaggagtgcg gcctccacaa gggcaacatc 120
gacaaggacg cccaggcggc ggccccagc tccgccaacg gcaacggctc ggcgggcgcc 180
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ctgcgcctgg agaaccgcgc cgagccgtgg ctctgtgtgc tgtacgcgcc ctggtgcccc 300
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gtgaaggtgg ccaagtccg cgcgacggc gagcagaagc cgtttg 406

<210> 6707
 <211> 413
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 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-A10

 <400> 6707

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cttctactcc aacgcctctg gagggctcaa gtgctacgag aacccaagc acaaggtcac  180
cgctgtcccc gccgacgaag aagagatctg cgggtgccact ttcaaggtag tggagggtc  240
tactgtcctg acggcgctgc actgatctat catcatcagg cggaggcgat gcgatgatga  300
tgcagaactt tgtacatgcg ttggtggatg gtggtgtaac atagtggctg ccaacaagtc  360
atgctcatgc aaaccgatga atctatctct gtatcatcga tctcggttgc ttg      413
  
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<210> 6708
 <211> 382
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-A11

 <400> 6708

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gccgcgtaca ccctcaagct cctccaccgc cggatcccc cctccgtgcc cgggatcatg  180
ttcctctcgg gcgggcagtc cgaggtaggag gcgacgcaga acctcaagc catgaaccag  240
gggccaacc cgtggcacgt gtccttctcc tacgcgcggg cgctgcagaa cacctgcctc  300
aagacctggg gcggccagcc ggacaacgtc aaagctgcgc aggacgcact gctgctgctc  360
gccacggcca actccctggc gc      382
  
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<210> 6709
 <211> 406
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-A12

<400> 6709

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agatctgccg gtttacttct tgggaccaca aaatggcatg ttttgggttg gatgtgtcta 120
tggaagaat gatgatagta gatttggctt cttctgtcat tctgctctgg agtttctgct 180
ccaaagagga ttttctcctg atatcatata ttgtcatgac tggtaagtgc ctctcgttgc 240
ttggctatac aaggaacagt atgctcttaa tgggatggga aatggtcgga ttgtatttac 300
catccacaat cttgagtttg gagcgcatca cattggcaac gcaatggcac attgtgacaa 360
ggctacaact gtctctgata catattcaaa ggaagtggct ggacac 406

<210> 6710

<211> 389

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-001-Q1-E1-A2

<400> 6710

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aggataaggg ccttgagccc tccgagttcg aggactccgt cgcccaggct ttcttcgacc 180
tggaagacgg taaccaggag ctcaagagcg acctcaagga cctttacatc aacgggtgcta 240
tccagctgga tggtgccggg agcaggaagg ctgttgtgat ccacgtccca taccgcttgc 300
gtaaggcctt caagaagatc catgtcanga tcgtcangga gctggagaag aaattcagcg 360
gcaaagatgt ggtaattgtt gccacaaag . 389

<210> 6711

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-A3

<400> 6711

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tccatttgca tccaaattaa tgccttgatg ttactacctt ctacgtttac attacagtac 120
 tttgggtgct gctgctttga cccatcctcg gctttgtatc ctctcctgt cctccatatt 180
 gcttttgccg aaatgacgat gacgacgggg ctatgtgcat acaaaataaa catgttttaa 240
 gatggggaaa aaagctatag atacctagcc ttgagggcta gtttggcaac accattttct 300
 caaaggaaat aaactaattt cttttaagaa aatgaaaatt atttggaag acgaggatgt 360
 caaagtagcc ctaaataatta gattcctccg ctggcactgg caggcagcta 410

<210> 6712

<211> 409

<212> DNA

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<223> unsure at all n locations

<223> Clone ID: LIB189-001-Q1-E1-A4

<400> 6712

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 cttgtcaaga aaatgacagg aaaggacccc aatgtgacag tcaacctga tgaggttggt 180
 gcacttgag cagctgtgca ngctggagtt ctgtctggtg atgttagcga cattgtactt 240
 cttgatgtga ccccttgtc cctaggtttg gagacactgg gtggtgtcat gaccaagatt 300
 atcccacgga atacaacctt gcctacctca aagtcggaag tttctcaac agcagctgat 360
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<210> 6713

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-A5

<400> 6713

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 aaccaagccc ttactatattc gggagttgga atttatactg cgcagtggcg gacgcggaca 120
 cgatggcgct ggacgacatg cagcgcgacg aggtgttcaa cagggacaac atcccagcgt 180

ggctgtccta cgcggggtac gccgcgtga gcctgatcgc ggtgatcgcc atccccgatca 240
 tgttccggga ggtgaggtgg tactacgtgg tggtagcgta cgcgctggcg ccggcgctgg 300
 ggttctgcaa cgcgtaggg accgggctga cggacatgaa catggggtag aactacggga 360
 agatcgcgct gttcgtgctg gcggcggtgg 390

<210> 6714
 <211> 415
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-001-Q1-E1-A6
 <400> 6714

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 tccagccctc cagccaagca aggtgccgac aggcagctgt ggttcgcgtc caagcagtcc 180
 ctctcctacc tcgatggcac gctgcccggc gactatggct tcgaccgct gggcctctcg 240
 gaccggagg gcaccggggg cttcatcgag cccaagtggc tggcctatgg cgaggtgatc 300
 aacggccgct acgccatgct gggcgcggtg ggcgccatcg ccccgagat cttcggcaag 360
 atgggcatca tcnccccgga gaccgcgtg ccgtggttca agacgggcgt catcc 415

<210> 6715
 <211> 102
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-A7
 <400> 6715

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 aaaaaaaaaa ataaaatata aaaaaaaaaa gagataaaat gg 102

<210> 6716
 <211> 409
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-A8

<400> 6716

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cagcccttca tccaggaaga ccacatgttc cagaagatca tggacatctg catccagcgc 120
ctccgcaagt gctactgtgg gctgacgccg caccacgtcg tctccaagtt cgacgacaga 180
acgtccacgc tctactacaa tgtcgccgag cccgaggacg tgaactgcag cgccgcctga 240
tgtaatatga tgtgaggggg agggggagcc accccagcat ctactagtct aatttttgct 300
gcgcagaagt ttcattgatgc agcagtgtta gtcgtgcgat tactgagagt gaaatactag 360
tggcagactg cgcgaggcaa tagagttgcc gagcctgtac atatacgtg 409

<210> 6717

<211> 229

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-E4

<400> 6717

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ggatatacaga gggatacgcc gagagtaggt cgtgcccgcg ctgcgcgacg ggcggtcaca 120
cactgcaaga aattcagagt cacacgtctc agcccgggca acacacacac atgcacacgc 180
gcacgctctg tgccgaacag gtcagagaca cacactgacg gcagtcaca 229

<210> 6718

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-E5

<400> 6718

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agtaagcacc agatacctcg ctgagaagtt cccatcagct caagctgttg ggctcgacct 120
atcaccttac tttcttgctg tggcggcaca aaaggaagaa aaactgtcac ggccaaagcc 180
tattcgctgg gtccatgcc aatggtgaagc gaccgggctg tcttcagatt catttgacct 240
tgtctccctt gcttatgtgt gccatgagtg cccagcacga gcaatcacgg gattagtga 300

ggaagcattc agggctccttc gcccgaggagg aacaatcgcc ttaactgaca attcccctaa 360
atccaaa 367

<210> 6719
<211> 365
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-E7

<400> 6719

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tgagaagatg aagaaatatg cttctgttat ccgtgtcatt gtcataccc agattaggaa 120
gatgaagggt ttgaagcaga agaaggctca cctgatggag attcagggtca atgggtggtac 180
cattgctgac aagggtggact atggctacaa attctttgag aaagagggtcc ctgttgatgc 240
tgtcttccag aaggatgaga tgattgacat cattgggtgtg accaagggga aaggttatga 300
gggtgtggtc actcgttggg gtgtcacccg gcttccccgc aagaccaca aggggtctccg 360
caaag 365

<210> 6720
<211> 335
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-F1

<400> 6720

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gcgtgggagg acacgtgggg ggttgctttc caggtcacat tgggtgttcac gaagtcttcc 120
aagtcatcaa ggtcctgggt actccaacag tggaagattt tcaatgcatg aaccgaatt 180
acacacagtt taagttccca caaatcaaag ctccccatg ggacaatgta ttcaacaata 240
ggattccgcc ataacctgtt gatctggtct ctgagctact ccagtactct ccaaatctga 300
aatgcattgc tgtggatgcg catgttcacc cattc 335

<210> 6721
<211> 391

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-F10
 <400> 6721
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 atggcttact accaggaggt ggactactgc tcggaggagg tgaggtcggt ggccccggcc 120
 ggcttcggcc gccacggagg cggcgtccag cagcacgtcg tcaaggagaa gttcaggagg 180
 gtcgacacgg tctcacgcgc cggcgccaac caccaccacc accaccatgg tcaccacggc 240
 ggccacggct tcgtggtgag cgagaccagg gtcgaggagg acatcaacac ctgcaccggc 300
 gaggtccacg atcgcaggga gagcttcctc gccagggcta actgagccgc ccggcgggccg 360
 gcatccacgc ccgttcgtgc ctgcctgcgt g 391

<210> 6722
 <211> 390
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-F11
 <400> 6722
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 gagccccgag atggagggtct cactcgttga gcgtgatcta cggtttatct ccttcagcac 120
 tggtcgtcgc ggctgcatcg ctgcagctct tggcactgat atgaccatca tgctcttcgc 180
 taggctcctg caggggttct cttggagcaa gatgaccggg gtggcgggcca tcgaccttta 240
 gcgagtccag gcacaacact ttcattggac ggccactcgt gctacagggt aagccacggc 300
 ttccagcgca cctctacccc gggatcttgc tttgtaagta gtcccaaata acggctgagc 360
 atgtagaaaa tttcaccact tatacatgct 390

<210> 6723
 <211> 355
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-F12
 <400> 6723

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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aagggaggaa gaacaaaagg ttaaaaagtt 120
 taattaaaca taaatgcaag gttgtaagct tttctatagt gtaactaaat ttaatttcat 180
 ggggggtggt tttaaaattt ggtgattggg aaaacctggg ggttttgcat ttaaccct 240
 ttgcagcatt atcccttttc gcaatctggg gtattttttt aaaggctcgc acggttggcc 300
 ctccgaaat ttgaccatt ttgaatggtg aatgggaccc tcctttttcc ggggt 355

<210> 6724
 <211> 434
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-029-Q1-E1-F3

 <400> 6724

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 tggacaattg cgggttcctt gacctcaaaa atgttccttg aaaaccccaa cctggcttca 120
 atccttacct gcgatgagga ccttgagctt ctcaaaggct gtgcttgctg cctgtccaag 180
 aagaggacca agtgcacacg ccgggtggcc aagccacatg ctggggtgaa gctgtgaagc 240
 tcatgttggt ctttctactg cagacgcaca atggatacta cagatggaga aataactaaa 300
 gcacagactc ctcagctgta cattagtata ggtttatatt agatacccat ccattcattt 360
 cctcggtgtc tgctcattgg gttttttttg ctgagctacc actgatggga actaccctgn 420
 gtgatacggg tggt 434

<210> 6725
 <211> 399
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-029-Q1-E1-F4

 <400> 6725

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 ttccgcctcg ctcaggetta tattcattga tggaacacaa ggaggcgggc tgcaaccacc 120

cggagggccc aatcctatgc atcaataact gcggcttctt cggcattgct gcaacaatga 180
 acatgtgctc caagtgccac aaggagatga taacgaagca ggagcaaggc cagctggctg 240
 cctcctccat cgatagcatt gtcaatggcg gtgacggcng gaaaggacct gtaattgctg 300
 catctgtaaa tgtggcagtt cctcaagttg agcagaagac tattgttgtg cagcccatgc 360
 ttgtagctga aaccagcgaa gctgctgctg taatcccca 399

<210> 6726
 <211> 402
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-F5

<400> 6726
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 ccaacatcat tatcaaaact gaagctccta gtgtaataac tgaagcttct gattgaaaga 120
 gaactattga actgggtaag gtacatgaac catgttcaat ggactccatg gagccatgca 180
 acacatttcc atctggagtt tcctgcgaag tgatgccaaa tgtagacact aacgaggaga 240
 agaatgagct tgaagagtca tgtattacca cagtgaacga agcgcacgaa caagggaaaa 300
 ctgagggaca gattgaaatt caagtagcat catcgatgga tatgataagt gatgaagctt 360
 taacagctga caatcaatac catggaattg gagaatcaaa tg 402

<210> 6727
 <211> 344
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-029-Q1-E1-F6

<400> 6727
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 gttcgcatgc ttcgaaaaaa cagttgaact tctgtataag catgtggtgc ccaaaccacg 120
 ttctgaatgc accaaaggag aacagttggt ggtaacgttc gccgccggat acattgccgg 180
 tgtcttctgc gccatcgtct ctaccctgc ggacaccgtt gtatccaaac tcaaccaaga 240

aaaaggtctt tctgccctag acgtcgccaa aaaggttggc ttgcccgtc tctggaaggg 300
attgggtcct cgtatcatca tgatcggtag attaanccgc gcc 344

<210> 6728
<211> 428
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-F7

<400> 6728

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agttatactg cttatgcttt tctttcttat agtaatatat tccgtctcaa aataagtcaa 120
tttctagaat cacttaaagt caaattatct taagtttgac caattttata ggaaaggtag 180
cgtcgtctat gtttctatga caccaaatga gtacattatg aaaattatct tatgggtgat 240
tagtgacact aattcagtgc cgtgctcttt ttatgaattt ggtcaaactt aaaaatagtt 300
tgatttaaga taactctgag aaattgattt attttgggac agagaatggt tctgggttgt 360
cttgtaaata cagttcttat tattagagta tatgatgact aggaccggtt taatccgaat 420
tatataaa 428

<210> 6729
<211> 383
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-E11

<400> 6729

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ccatgtgcaa ttacacagc ctacaaatga agttgaaggt acctgaggat gaaccactgc 120
aaactaacat cagggcatct ctactgtggt ccgagaaaga aagttttgaa gagtataatg 180
agtcttttat ccttgagcgc ccagaacgct tctcatttgc tgcgtaccaa acagtttcag 240
gcatgtcaga tgaacttctc actgtgcaaa actacaagat acaaccaatg gattcgacag 300
acacccttga aaggtgaac actggtacca attttgtaaa ccataccacc ggaatgatac 360
ccgcaaggct tgccattcaa ata 383

<210> 6730
 <211> 395
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-C5

<400> 6730

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ttccagaaag tgaagaggga gcacggtgcc ctgaggcaga aactagaggc ctatttccag 180
ctgctatgac aagctggtcc tgctggagct gccacaagc ctggatgtaa gaactaggag 240
ttgcaggaaa acggattatg acccaagaag atacctcact acaactgact ggcccgggtg 300
ccctgctgcg cagcaattag gggtcagcat acgaagcgaa acaagagatg atatgcatgg 360
atatgcacaa aactgtaata agagattgtt ttttc 395
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<210> 6731
 <211> 294
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-C6

<400> 6731

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aaaaagaact ctcggaagc tctttgaaag gggagctccc atcaagcaaa agagcggcca 180
gcaactcaag cgccggggcg cctttccccg acctagagat tgagagcgag ctaaacgagc 240
tgcgaggaa gggcaaagaa tactagagag tatagactct ccaccaaca tctt 294
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<210> 6732
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-D1

<400> 6732

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 aaaggaaaac atagctgaac caatgcggga tatcagaaga gcacttttgg aggccgatgt 180
 aagtttgcca gtagtaagaa gatttattga gtctgtaagt gaaaaggctg taggcactga 240
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 acaactgatg ggcggggagg tatcagattt ggtgtttgca aaatctggac caactattat 360
 attattggca ggtctgcaag gtgttggaag aactactgtt tgtgcgaagc ttgccttcta 420
 tctcaaaaaa ctgggc 436

<210> 6733
 <211> 382
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-D10
 <400> 6733

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 gaaacacatg ctccattag tccagattgc tcaactgctc caatctctat tagtctacac 180
 ttcattccat catttacgct agtggccatc gaagagccac ctgtgcatcc ctatacggta 240
 caagaggcga ttgcggccag cgtcatagtc caggcagttg ccgagttgca agtgtaagcc 300
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 ctgaaccacc taaccatggg ga 382

<210> 6734
 <211> 197
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-D11
 <400> 6734

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cgtagatgc actggcatta gtctaggata ctcaattgca cgtatttcta tgggcctaca 180
 cttcttcaca ccattta 197

<210> 6735
 <211> 364
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-D3
 <400> 6735

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 ccgttggtta ttggcctgcc ggaaaactca ggttgcgga agagcacctt catgcgcccg 180
 gtcaacaaac ttctttccgt gggccccccg agcccgccca aagggccgga accccggact 240
 caaacacgct caacagtgc accaagacag tgatatgcct cgacgactac catttcctgg 300
 aacaggaacg gcatgaacga taaaggtgtg accgcctcc accctaaggc caacaacttt 360
 gatc 364

<210> 6736
 <211> 390
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-D4
 <400> 6736

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 tggatgaattt tgctacaaaa aggggccgca aagctaggcc taacttgaag gtgggcattt 120
 gtggaaaaaa cgttggaag ccttcgtctg tggccttctt cgcaaaggct gggctggatt 180
 acgtttcttg ctcccccttc agggttccaa ttgctaggct acctgcacct caagtgcctg 240
 tctgaggctg cctcctccgt tggaaaccgg attgcctgct gctgggtgat gtggtgatca 300
 acagtattat tacacagcca tgctaagtga acattactag tagcagtgc cataaaagct 360
 acaatcccat ctcccttttt ttccaatca 390

<210> 6737

<211> 429
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-D6

 <400> 6737

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 cggcgacgac gcggctcgctg gacgcggaca tgacgggtgga cgagttcaag gagtggctgc 180
 ggcggttcga cacggaccag gacgggcgca tcagccgcga cgagctgcgg cgcgccctgc 240
 gtgccatccg ctcccggttc acgggggtgga ggagcaggca gggcatcagt tacgccgacg 300
 ctgacggcga cggctacatc gacgacagcg aggtcgatgg cctcatcgag ttcgcgcaga 360
 agaactcggc ctcaagatcg tcgcctactg atctcacatg gggcgcgggcg cgcggccgctc 420
 ggggggtgg 429

<210> 6738
 <211> 372
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-E1

 <400> 6738

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 ccgccattgt cgcccgactt ccgccgtggg tgctggccgg gcgccgggtc ccccgtaaac 120
 gacgtcctcg cctcgctccg ccagctccgc ctcagcaggg ccaactcgtc cccgtcgggc 180
 gggtggtgcg gctaccctgc atccgcggtc gcgtacggat cgctacggg gggcgcgctc 240
 tacggcctgt cctccacccc gaggtccacc gccggctccg gctacatggc caacctggac 300
 cctctcgacg tcaccttcgg cggcgacgag gagcccgtgg agagggtgga gtccggccgc 360
 gcactccgcg cg 372

<210> 6739
 <211> 401
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-C3

<400> 6739

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tggcaacgga atttataaca aaaccaacca aaaatgcccc tggggcaaca acaaccctcc 120
aattgcttcg ggtccaaaca tttggtaatg gatttggcat ttaacaatat tgcacatgtc 180
aagagtgaat actttcaaac caatggacac tattgctcta catttgatgt tgccattgcc 240
aaggtttggc aagctaggac aagggcaatc aagtagaac caaatttcaa ggtgcatgtt 300
tgcttctttg ccaacactcg ccacctcttc acacatgtgc tacccaaggt tggtygcttc 360
tatggaaatt gcttctatcc agtgactgtc acagcaactg c 401

<210> 6740

<211> 392

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-A9

<400> 6740

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taaaatatgt cgaaacacgg gcaaaaaaag tataaaatgt acgaagctta agaatgatca 120
tgaagggtcaa gctattgctg actgggaaag atgcccttct ggatgaagat tataaaatgg 180
gggagggccc aaatgggtggg gtgggtgcaa attgtgcca attaaccttg atagtgcctt 240
gctgattcac cataagtcgt atgctgggggt attgcctttt gtacttccgg atgggtggac 300
agtagcagtt ttcaatatgt acgacctgct taggggaatt ctgttgtgcc tcgagttcaa 360
caacttccat gtgcttttgt ttaccacct gg 392

<210> 6741

<211> 209

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-B1

<400> 6741

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agcattcacg acagcctgat cgaggctggg gtccgcgctg agtccgacta ccgtgagggc 120
tactcccccg gatggaagtt caacgactgg gagctcaagg gtaatcctct tcctaaccaa 180
ttccgtccca aggattccca aaaaggttt 209

<210> 6742
<211> 424
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-029-Q1-E1-B12
<400> 6742

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aacgggtgga caagccactt ctggaccaga ttgtaagagc ttcatatgat cctggtgctg 120
caaaagtcct tgagagtgtg ttcaacttca atctttcaat tcctcttaac ttcttatttg 180
attcttttgg aggggaagata ttagttatcc aggggtatgaa agaccccctt acaaaatctg 240
aggcatttgt caccatgctc cgagaacatt gcagcaagggt tcaaatcaga gagttaaagt 300
caggtcatgc tccacatgat gaagttccag atgaagtaaa taccatacta tgtaaagtgg 360
tggagcagat tgaagttaag ccagccctgg agaaagacaa ggcaatatag gtaacattta 420
gaat 424

<210> 6743
<211> 427
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-029-Q1-E1-B6
<400> 6743

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gccggagggg ttctcgcagc accgcgagta cggctctggc cccatgggtc tcgagaccac 180
ctcccgcggg gagecgcgct acgacatctt ctgcgcgctg ctcaaggagc gcatcgtctg 240
catccacggg cccatcgccg acgacacggc ctgcgtcgtc gtcgcgcagc tgctcttcct 300
cgagtccgag aaccgcgtca agcccgctca cctctacatc aactcccccg ggggcgtcgt 360

cancgcgggg ctcgccatct acgacaccat gcagtacatc ggctgcccgt cacaccctct 420
gcacgcgg 427

<210> 6744
<211> 443
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-029-Q1-E1-C1

<400> 6744

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ggcaaagcgc cgacaacgtc agcgtcgtcg tcgtcaacct aaggcggcgc ccgcgatcgt 120
gatcgggtgtt ggctccgatg gactagccgt tcttggttgg ttggtttcc tggccgtccg 180
taagttcgaa tgggagagcc cagttcacct tcgcttcggc cgagcaatca ttgacaaga 240
tgtcaaagcg aagatcgaac aaaatagtga gacccctagc agaattgcat gctacttcct 300
tttacagtag tacagcagga ctattgttcc gtagcgttc ttttttttat ggggtgggtgg 360
agggtgcgtt tgtgatctgg tcggacagat catcccgctt ttcttcccc ggtaaattct 420
ccanatagaa aagcgcgtgc gtt 443

<210> 6745
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-C10

<400> 6745

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acaagggcct tgtcccgtc gccggctcca acaacgagtc gtggtgccag ggcctggacg 120
gcctggcgtc ccgcgaggcc gcctactacc agcagggcgc gcggttcgcc aagtggcgca 180
ccgtcgtcag catccctaac ggccccctcc agctcgccgt caaggaggcc gcgtgggggc 240
tcgcacgcta cgcgccatc tcacaggaca acgggcttgt gccgatcgtg gagccggaga 300
tcctgctgga cggcgagcac ggcatcgagc gcacgttcga ggtggcgagc aaggtgtggg 360

ccgaaacctt ctacgccatg gcggagaaca acgtcatgtt cgagggcatc ctgctgaagc 420
cgt 423

<210> 6746
<211> 211
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-C2

<400> 6746

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accagggtgt tcaagtgttc ccagagataa tggttcctct tgttggaaca ccacaggaac 120
tggggcatca agtgactctt atccgccaag ttgctgagaa agtggtcgcc aatgtgggca 180
agactatcgg gtacaaagtt gggacaatga t 211

<210> 6747
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-A8

<400> 6747

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agtagatatg tctagactcg ggcacaatac tgtaactgt gcgagcttca gactgctcct 120
gaaggtcacg ctattgctga ggccgaagat gcccttctgg ctgctgatca tgacttgggg 180
caggcgccag tgggtggggtg gtggaaattg agccaggaa gcttgagagt gacttgctga 240
agcagcagaa gtcgtaggct gttgattgcc tacgtatttc gggatatatg gagagtagca 300
cgaagcagta tgcaggacct gcttcggcta attctgccgt gcctcgactt cagcaatttc 360
cttttgcttt tgtatcatga cctggcacgt ccttggtgtg t 401

<210> 6748
<211> 262
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-H12

<400> 6748

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aatccgcccgg cgctgagatg ttggtttatc aagacctcct atctggcgac gagctcctgt 120
cggattcatt cacctacaag gagctcgaga acggcgctcct gtgggagggtc gagggaaagt 180
gggtcaccca aggtcctggt gatgtagaca ttggtgccaa tccatccgcc gagggtggtg 240
aggatgaaag cgttgatgac ac 262

<210> 6749

<211> 304

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-028-Q1-E1-H2

<400> 6749

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cgcgggcggtg gcgctcgcgt ccttcccgtc cgcggcctcc acctccgccc cttcccgct 120
ctcggccagc agccaccgcg gtcagcggca ctccagggcc gcaaccgtca gatgtcccag 180
cacgtcgccc aacgtgtccc agggcgcgcc ggcgcccggcg ccgccaagc cgcanatcga 240
gctcgagttc gtcgggccga agcccgggtg cgacggctcc ttcccgggtg accgggcgga 300
ggcg 304

<210> 6750

<211> 275

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-H4

<400> 6750

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gccaaagcagc cgcgtggtct gtttgcagat caattcgagg caatatgatt ccatttgggc 120
ccgaaatttt agcatgctaa gagtcctcga tgtctacaga atctcgccaa cttcgatgcc 180
cattacaacg ggactggccc ggagatactg cgccagacga atggcgagat cgacgctttc 240
gtagcagggg ctgggacatg cggtagccta cctgg 275

<210> 6751
 <211> 234
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-H5

<400> 6751

acaaccgcc accccaccc caaggaagga accctagtag cctacccgtg agaaccgcc 60
 ccgcacaacc ccggacgtgg tggcaggcga ccgatccgga tccatcatcc caagcttcct 120
 ttctgtctcc tcttcatcca tctccacaac gataatcaag gaacgaatgc catgggtttg 180
 ttctaacttg acccggacat catccgatgg ggtcttcaac atctcctccc cgct 234

<210> 6752
 <211> 252
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-H6

<400> 6752

cgggccgacc cacaagtccg acgggagtgt acgtgccacc atcagcggta tcattagtgg 60
 ccgccgtgc gaccatctca tcctcctcgc acttgctcct cctctcccg ccatcaggcg 120
 cctccctaca atgcggcctc tctgcctcgc gccatcccaa agggcccggg acggttacgg 180
 ctcatgctcc tgccgctaag gacgtgccgt tcatggcggt cgtggacact actgcagcgt 240
 ccactgcggc tg 252

<210> 6753
 <211> 442
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-H7

<400> 6753

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 tagttttctt tactacacga cgacaaacat ggggaagcct gcgaagatcg gagagtgggg 120
 tggatacgcc ggcgatcgct gggatctgag ggctactccg gaccggctga tcgaggtgaa 180

ggtcacggcg gacaacagca gctgcatccg ctccatctcc ttcattctaca tcggagccga 240
 tggcaaaccg tacgaggagg ggccatgggg tttcggccat gctggcacgg agtacaagat 300
 tgatctgtgc aggttcgacg agagcttgac ggagatctcc gggaccacgg gccagccta 360
 caacattgac aatctgggtca agtctctcaa attcgtcacc aacaaacgcg cttacggacc 420
 gtacggcagg gacgagggca cc 442

<210> 6754

<211> 379

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-A10

<400> 6754

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 ggcgaggagc aggggtggtgg cccgtgtccc cgccacaagg aggagcgtcc gtgtagctgc 180
 cgtcgtcgcg accgaggccg cgcagatcga ctacagctca agcgtctcgg tgttcccgat 240
 ggaggcctgc gacctgcttg gtggcgacgc gtgcaacggg cccatgttcc cggaggccaa 300
 gcccgctcg gcggcgggcg cggcgagcag gattgtggtc ggggtggaca gggactacct 360
 gtcctacgac gagccaaag 379

<210> 6755

<211> 331

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-A12

<400> 6755

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 ggctccaccc ggcgagcgaa caatggaggc gggggcgctc ggccctggcg tgcaggcgcg 120
 ggcgggcgggc ttcggctcca gccggcaccg gggcggccta caggcgccca ccgggagcct 180
 gagagtcgct gacccggcgg gacctgcggt cgctgtcgcg gctcgcgggg ccaagcccgt 240
 cgcaccgctc cgactccgtg cgaagaaatc gtccggaggt catgaaaact cgcacaactc 300

cgttgacgaa gctctcctgt tgaagagaaa a

331

<210> 6756

<211> 315

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-029-Q1-E1-A3

<400> 6756

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ttggggccaaa aatatttgaa acacccccca acttaaaaaa tgcggtcagg gaggcaattg 120

aggggatgag ggtcgacta ngtcgggctg tgattttaaa ttattgcctg caaggtctct 180

tccatccagc aaggaaagta cgagaagtgt attggaagat atacaactct ttgtacatcg 240

gcgcgcaaga tgcacttggt gcttcttata ctgccctgga agacgatggg gataacatct 300

ttagtcctcc aaaat 315

<210> 6757

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-A5

<400> 6757

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gctggggagg ctggaactgg tattgcagaa cttattgctc ttgagatttc gaaacagacg 120

aatgctccaa ttgaagagtg ccgcaagaag gtttggtctg tggactcaaa gggtttgatt 180

gttgactctc gtaaaggctc ccttcagcca ttcaagaaac cttgggcgca tgagcacgag 240

cccttgaaaa ccttgatatga tgctgttcag tccatcaaac ctacagttct gatcgggaca 300

tctggagttg gaagaacatt cacaaaagaa atcattgagg ccatgtcttc cttcaacgag 360

aggcctatca tcttttctact gtcaaaccga acctcgcat ctgaatgcac tgctgaacaa 420

gcatatata 429

<210> 6758

<211> 225
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-A7

 <400> 6758

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 tcgtcgagct cttcgtcggt gtcggtgcct ccaggggtgcg cgacctcttc gagaaggcca 180
 aggccaaagc gccctgcatt gtcttcattg atgagattga tgccg 225

<210> 6759
 <211> 286
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-H10

 <400> 6759

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 tgctcacaca tgagacctac gtatgcctcc gttccttggtg atgaggaaat atgcttgctg 180
 tcgttctccg tgggcgttgt tcctacaaat tcacttgctt tctgtctctc tctctatata 240
 cacactgtat aaaacaagaa cagctgttta tcctctcttc ttatat 286

<210> 6760
 <211> 395
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-028-Q1-E1-F5

 <400> 6760

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 tttcaatgtg tcgtctgctt taaaaaattt aaagtcaaaa gcaattttaa agccatttta 180
 gccgttcatt gattagcttc ttattctttt tgattcctaa ttttttaaaa aattatgttc 240

ctgacatttt gcttccgttt actccgaaat aagcaaaaaa atttttcgtc ccaagggtct 300
aatttacgan aaaaacaaat tttatcgctc aatgtatata aaaaactgta aattanaaac 360
attttttaat gaatttgttt taaaaataca ttttt 395

<210> 6761
<211> 453
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-028-Q1-E1-F6
<400> 6761

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cgcccgatcg agagcgagcg catccgcgcg ccggggagag ctttgctttc ggtgggtctgt 120
aacgactcaa cgacgacggc aggcggtaga taaaggcgcg cgatgtgcga cgcggcgccg 180
aggtacaggg gcgtgcgga ggcggcgtgg ggccggttcg cggcggagat ccgggacccg 240
gcgaagcgcg cgcgcgtctg gctcggcacc ttcgactcgg ccgaggccgc ggcgcgcgcc 300
tacgacgtgg ccgcgcgggc cctgcgcggc ccgctcgcca ggaccaactt ccccgcgctc 360
gccaccacct cccgcgcgcc cgcgccacg tgcagctccg gctccaccgt cgagtcctcc 420
agcggggccc gcgcggggga ccanggccca ggg 453

<210> 6762
<211> 354
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-028-Q1-E1-G3
<400> 6762

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ataagttaag ttaataagtt aaaaaaagtt tattggagaa taaaattggt aatccgaatg 180
tttatgccac tttgatttga ttttaagcgt aagggaatct tctgattttg cggggagtaa 240
accactaaag gttcattggt tgatttttca ttatatgtgg cacagaaata tcttcctttt 300

gataaaacaa ctaaggagtg tctatTTTTT tgacatcaag ataaaatact tttt 354

<210> 6763

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-G4

<400> 6763

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gcaagaacaa agagtgaag aagcacacac tccacaaggt gactcagtat aagaaggga 120

aggatagcct gtctgcccag ggaaagcgcc gttatgaccg caagcagtca ggatatggtg 180

gtcagaccaa gcctgtcttc cacaagaagg ccaagaccac caagaagatt gttctgaagc 240

tgcagtgccg gagctgaag cactactcac agcacgccat caagagatgc aagcattttg 300

agattggggg agacaagaag ggcaaggga catctctttt ctaagcttct cgtccacctg 360

tcgggttttt gattttaacc tgtgggtcta ctactactgt tataaa 406

<210> 6764

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-G9

<400> 6764

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gtcgcgctca actgccccgt gcaccggtg ccgtcgcatc gcccgccga cactccggcg 180

cccaagaacc tagtacagag gccggatata ctccgggaag gggcgctgga ctccccggag 240

gacctgtacg tggacgccgt ggccggcggtg gcgctgtaca cggccacgag ggacggctgg 300

ctgcagcgga tgatgcaccc caacaacggc tcctggggagc ggtggcgctt cgtcggcggc 360

acgggcctgc tcgggggtgc gccgtccgcc gacggcacca tgctcgtctg cgacgccgac 420

aaggggcttt 430

<210> 6765

<211> 453
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-H1

 <400> 6765

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 aaccaaggt agctagctag ccgcgactcg ttggctagac gattcaagca gcagcgcagg 120
 atggtggcgc cgggtggtgat tgcgtcggcc gggctgggca tgctggccgg cgtggcgatg 180
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 gactccggct gccggacctg cgctgggttc gggaggatgc cctgccgag ctgcggcggc 360
 tccggcacgg gccgaccgt cctgcacgg gtcaccgtcc agcaccagaa gccgccgccg 420
 ccgccgccgc ccggctacaa ctgatcgatg gtg 453

<210> 6766
 <211> 430
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-F4

 <400> 6766

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 tgggtgaaaa ccttcccggg aacgggttcc caattggcaa aagtcccact tggccctggt 120
 actccgttgt taccaacaaa aaaaatcagc tggcgcacga ggatgctggt ggtatcagac 180
 tggacacgcc gattcatctt cggaagagac tcgagttgca tatgatcaag agggaaaaga 240
 ttttgctgtg acatatattc agatgaacga ggccagtaca gcctcttccc actttttttt 300
 agtctgattt cacataaatg ttcccctttt gttgttaagg aagaatctga cttcccctgc 360
 actttgtata gtgcaccacg aagaaattcc tttgtacctt ctttttcttt ttgagagagt 420
 tgcactgcac 430

<210> 6767
 <211> 436
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-D7

<400> 6767

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attattaagt ggtgcacggg gtcaaaagca gatctatacc atgttatgat ctacatgttc 180
cttagcccaa cagatgagat tgggtgaaaac cagttgttta gtggccagaa gacagtgcag 240
cttgttctac ttctgcttgc tctggtgtct gtgccttga tgttgattcc aaaacctctt 300
ctattgaaga agcaacatca gcaaaggcat caaggtcacc agtacgcaat gcttcagggc 360
gttgatgaat cagtgggagc agagctgggg gaacatcatg aggaagcaca tgaccatgag 420
gagtttgagt tcagcg 436

<210> 6768

<211> 332

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-D8

<400> 6768

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gggatgaaat gattgacgag cactgcgata ctgatccagt gtgggtttcca gaaatgttta 120
aggattggta gtgggtggat ttcttgtaaa tttatctcaa acctaaattc ggggttttatg 180
ctatagaaaa tagaaatact tcatgatgat gaatcatcag gttaagatcg atctaaacca 240
atccatttta tatatacata cgacatgcca acgggttaaac aacttattag aaatgcaaga 300
cagccaatac gaaatgctag aaaatcggcc gc 332

<210> 6769

<211> 197

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-E4

<400> 6769

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atccgttcaa cccaatgggt tacttgcca aaattgcaac aacttccgga acggcggtta 120
cttcggcgaa gggcccaaaa aaaacggcgg caatcgcccc ggggctcttc ttaataacct 180
taccgccggc ttcttca 197

<210> 6770
<211> 440
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-E7

<400> 6770

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ccggtgtgtg ggattctgct gcagatcgat ccgggcaccg gaagccaccg cctgcgcctc 120
ttctgccccg tctgccccta cgtctgcccc atcctgaaca agatcgtgaa gaaggcgagg 180
ttggtcaaaa aggaggtgga gcccatctcc agcacggcgg atgagatgaa atcgccccct 240
aagaccgcag ttacatgcca aagatgcaac catggagaag catacttcaa gcagatgcag 300
attcgatcag ctgatgaacc gatgacaaca atatacaggt gttgcaaaga agaatgccag 360
catgaatgga gagaggactg accatagcat tcgcactttg cttacacttc gctccctgtg 420
cttcttcagt tttgagtgtt 440

<210> 6771
<211> 388
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-028-Q1-E1-E8

<400> 6771

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caccatgcgc aagaccgtgg gcaagcccaa ggtggcggcg tccggcagcc cctggtacgg 180
ccccgaccgc gtcaagtacc tcggccccct ctccggcgag ccccgagct acctcaccg 240
cgagttcccc ggcgactacg gctgggacac cgccgggctg tccgccgacc ccgagacctt 300

cgccaagaac cgcgagctgg aggtgatcca ctcccgtgg gccatgctcg gcgcgctcgg 360
 ctgcgtcttc nccgagctgc tctcccgc 388

<210> 6772
 <211> 431
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-028-Q1-E1-F2
 <400> 6772

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 atacgcgcgc ggcgacgcac aggtgggtcaa cgcagatttt gtaaagagca gcgtgcgtcc 120
 cgatgactgc cctcgggacg gccttcgga gtttgactc gttggccggt ccaacgtcgg 180
 caaatcgtcg ctgctcaact cgcttgctcg ccgcaagcgc cttgccctta cctccaagaa 240
 gcctgggaag acccaatgta tcaatcattt caaagtaaata gacagctggt atcttggtga 300
 cttgcctggt tatggatatg cttctgcacc acaggaagct cgtaccaatt gggatgaatt 360
 tactagaaat tactttctca gtcgggagaa tttggtatcg gtttttcctc ttatagatgc 420
 acgtatacct g 431

<210> 6773
 <211> 408
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-028-Q1-E1-F3
 <400> 6773

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 tcggcagggc ccgggaggag ctggcgcttcg acctcggccg gccgcccacg gacgaggagg 180
 tgcgggagag ggtgggcctc tccccgcaga ggtaccgcga cgtgctgcgg atggccaggc 240
 ccacatactc gctgcacgcc cggaaccgcg tcacgcagga ggagctcatc ggcgagggtca 300
 ccgacgccga agccgtcggg gtcgacgccg gcggcaagca cgacgcgctg ctccgcctcg 360
 ccatcgatga cctcctggac tctctgaaac ccaaggagag cctggtga 408

<210> 6774
<211> 337
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-C2

<400> 6774

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gatcaaaatg gcggcgtcgg atgttaagta ccgctgcttc gtcggcggcc tcgcctgggc 120
cacggacgac cactccctcc acaacgcctt cagcacctac ggcgaggtcc tcgagtccaa 180
gatcatcctc gatcgggaga ccagagggtc ccgcggtctc ggcttcgtca ccttctccac 240
ggaggaggcg atgcggaacg ccatcgaggg catgaacggc aaagagctgg gacgccgcaa 300
caaaaccgtc aaccaagccc aatctcgagg cggccgt 337

<210> 6775
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-C4

<400> 6775

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gtgctattgg gctcatgcct atgatcgatc agggcgagaa agatgataag attatagcag 180
tctgtgctga tgaccctgaa ttccgtcact acacggacat cacggacctc ccaccgcac 240
gccttcaaga gatccgccgc ttttttgaag attataaaaa gaacgaaaat aaggagggtcg 300
cagtgaatga gttcctgccg gcgaaagatg ccatcaacgc aatcaagtac tcgatggacc 360
tgtatggctc atacgtcatc gaaagcctga ggaagtgatc tccagctgct tgattgtgg 420
tgtggatgct aca 433

<210> 6776
<211> 409
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-C5

<400> 6776

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accgcgtccg gctccgtctc cgtctccttc gcccgcgcg cgcgggggct gccctccctc 180
cgctggccc cgccccgcg ccgcggggac ctgccaggc cccgcgccgc ggccgatgcc 240
gcagcggaga gctacacgtc cgcgctgtca gaggtggccg tcgagaacgg caccctcgaa 300
cagacggtct ccgacctgga gaagctgggg aaggtcttcg cggacgaggc cgtcgccgag 360
ttcttcgaca accccaccgt ccctcgcgag gagaaggccg agtcatcg 409

<210> 6777

<211> 351

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-C7

<400> 6777

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tggcagccac gccatcagcc tcacacctat aggaagcacg accaccacca ccaccacaaa 120
accacgtacg aggacaagga tggcgactgg atgctcgtcg gcgacgtccc ctgcaagatg 180
ttcgtggcaa cctgccagcg cttcgtctcg atgaaggggt caccggccgt gaacttggca 240
ccaagagccg cccgatgagg cacacgccgt tgggcgttgg cacgcacca cgcactggcg 300
tcttcgagga aagggggaac tctgctggtc ttgcggacgc tcttcccgtc a 351

<210> 6778

<211> 443

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-C8

<400> 6778

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gtccgggggc atcacgaatc tatgtgagtt gttgtggcat ggctcgtagc gccattcaga 120

attcctcgcc ttttgcgcct gagcagcatg atgattgtag taaatgaaat gaatagtgc 180
 taatagttac attgaaatgt tgcacatcgt tgacatgagg acataacttt tttttatctc 240
 ctgctgtaac gacaacttgt ccgcttccgc ttcctgctcc tcattgttcc cgtttactga 300
 taaaacagca gaacctaatg ctttttgcaa actgtgtgcg attagattag atactctccg 360
 ggggtgctgca taatatttcc tttggcctgt atcatttctg atgtcatttg tcacatctgc 420
 ggatctgccc caccatgctt gca 443

<210> 6779

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-D11

<400> 6779

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 atgaaccag gggtttacga gacactgggtg atatatgaga catcggcctc tgaattggaa 180
 attattcgtg acatatcag cacatttcca tctcatatat tcttccaaca aaggcatggg 240
 ccaggccaaa gatcattgta taacattttg aaagcatatt ctgtctatga cagggatgtt 300
 ggatatgtgc agggaaatggg attttttagct gggttgctgc ttctttatat gaggtaggag 360
 gatgcattct ggttattagt cccattgcta aaggagctg tccatgcacc a 411

<210> 6780

<211> 388

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-D4

<400> 6780

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 gggatgggtg ggccttctct tggacaagaa aatttttacga ggcctactta tgggcacagg 120
 actgctgctg caccgtgtga ctggatttgt actatatgag gatgtatgaa ttttgcccg 180
 aggacctcct gctttcagtg caatgaacct cgtactgagg atgctcttcc agctgatgag 240

acaggttccg cttcacactt tgggagaagg ggatctgaac taggtccaac tcatgtttta 300
gttggtcgtg gcttggatga aaatgctgat gaggaatgc ttcggtacga atttgctaag 360
cacgcacat taaaggacat cccccttg 388

<210> 6781
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-D5

<400> 6781

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accggggata tttcagtccc ttatgggatg gctgtctggt cgactggcta atcgccgtgt 120
cttggctact gatgaatggc taagggtccg tgaatgtgat ggtgtctatg caataggtga 180
ctgtgctaca ataaaccaga ggaaagtaat ggaggacatt tcagaaatat tcagagtcgc 240
agataaagat aagtctggaa ccttgactgt gaaagaaatt caagatatcc ttgatgatat 300
ctacgtgagg taccgcaag tacagctcta ccttaagagc aagcagatga acggcatcgc 360
tgatctagtg aggagcgcca aaggagacgc tgagaaggaa tccgtggaac tgaacat 417

<210> 6782
<211> 440
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-A2

<400> 6782

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ttaccagctt aggtcacggg gggatgcac gggatcagtc tagcaagcac ctaagtacag 120
aggactatgc agatatggtg acaagatcaa aagagtctct tccatatcct tgggtggctg 180
tgatgatagg tttgaagaat gcaatattgc caataaagat aggccagacc aaataaaaca 240
tgctatgggg aaaaaagga agaccaagag gcgtctagat tcccatattg acgaggaagt 300
ccgggtgtct gaagatgcat acgtttcaga ggatgaggat gataatcaga gtgaacataa 360
ctacgaacat agcttcagtg aggattagtc aactccaact gaatttacac aagctgaaca 420

aggatgatcga cacaatgggg

440

<210> 6783

<211> 179

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-A3

<400> 6783

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ctgctgtaca ttttgtgtaa cacaataatg gctgccaaat gggtttacaag gtacggcagt 120

tgctcattga caccatgtcc gagaattttc cccaccgcta ctcatcttct tgccaccac 179

<210> 6784

<211> 446

<212> DNA

<213> Zea mays

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<400> 6784

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ctgctcacgg ccatgtctca gagcggaaac gacagggttcc tcgtcgacgg attccctcga 120

aacgaggaga accgccgagc gtacgagagc attggttgga ttgagcctga gttgggtgctg 180

ttcatcgact gccaaggga ggagctggag cgacgcatcc tgcaccgcga tcagggaaga 240

gacgacgaca acgtcgacac tataaggaag cggtttcagg ttttcacga ctccactcta 300

cctgttggtc tgtactacga cagaatgggg aaggtccgac gggtcgatgg cgccaaatcc 360

gctgatgcag tctttgacga tgtgaaaggc atatttactc aactacggac cactcaggga 420

agccaagggtg gcaatgcgag cagcag 446

<210> 6785

<211> 274

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-A5

<400> 6785

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gcacggggagt gttaccgtgt cacgccttat caggcgccgg agcggtgga tccggaccgt 180
ggtggtggac gtcgccgctg gacaccttgt accgcgcggc ggtggtgctg ggcgacctgc 240
accggtgac ggcgcgggcg gtggtggccg tgcc 274

<210> 6786
<211> 223
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-028-Q1-E1-A8

<400> 6786
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atataaaaag aataaaaata ataaatccat aaaaaaaaaa aactcagagc ggtggccgat 120
gatcaggggg ttccggttca ggtgccggcg ttttcctca tctctctcga ccgctgtgtc 180
gccctctccg ttttcggtcg tcattttctt ctccgcgcct ttc 223

<210> 6787
<211> 420
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-028-Q1-E1-B1

<400> 6787
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ccaccaacct tgggaaacat ctccacacta ggggtagttg atttttcagt gaatcaacta 180
agcggaagca ttcctaataa agtttgcaa atcccaaaca taacagtgtt aagtctagca 240
caaaataacc tatcaggtgg aatcccagat actctctcta acttatcttc tcttacatca 300
ttaggcttga acaacaataa gctaggcagc gcattgccat caaacattgg cgatgtgttc 360
ctcatctaa atatactata cttagattac aacatTTTTG tgggtacaat tccatcttcc 420

<210> 6788
 <211> 300
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-B3

<400> 6788

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 ggcgccgccc taatttataa ccagcaccat gcctgggctg acaagtggat cttctgggtc 180
 ggcccccttca tcagcgcagc gctggctgcc atctagcacc acctgatctt catggcgatc 240
 gcgttcagga gtaggtctta aaggatcaga tgctgctgct tcgacatgct gccggtcttg 300

<210> 6789
 <211> 297
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-B5

<400> 6789

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 tacgaggccg gtgcccgtt tgccaagtgg cgtgctgttc tcaagattgg cccaacgag 120
 ccgtcacagc ttgccattga cctgaatgct cagggtctgg ctcgctacgc catcatctgc 180
 caggagaacg gtctgggtgcc aattgttgag cctgagatcc ttgttgatgg cctcatgac 240
 attgatcgct gcgcttacgt cactgagaca gtccttgctg cctgctacaa ggctctc 297

<210> 6790
 <211> 425
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-B8

<400> 6790

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gacgcacggc gtgcagatgc ccgacgcca cgcgtcggtc gtcggggcca tgacgcacag 240
cttcgtccgg acgctggagt gccagccgcg cggggtcacc tacggccacc tgctcagctc 300
catgagggcc atcatgaaga atcgcggcgg gggctgcgat ctgcacgggg ccatccgcgc 360
acccatccgc accgtcgcca acttcagcgg cgtgcacgtc tccatgtcca atccctccgt 420
ctctg 425

<210> 6791
<211> 336
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-028-Q1-E1-B9

<400> 6791
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ctggtcgtgt ccgccttctg ctccacagag gcactccctg cttccgcggg tatggcaggc 180
gtaatggtga gcgcaggagg aagtctgtcc gtggttgat tgtgagcaa gacctatctg 240
ttatcaactt ggtaattgtt aagaagggtg agaacgatct gcctgggtta actgacactg 300
anaagccaag gatgaggggt cccaaaaggg cctcca 336

<210> 6792
<211> 448
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-028-Q1-E1-A11

<400> 6792
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gaagcatccg caggctgcaa gaggtcgttg acatcgccgt ggacatcggc acggctgtct 180
tcgtggccgt gcgggtctcc ggctcgtct tccgccccg gctgcccacg ccgactacga 240
catcgtcgtc gtcgacgacg tactactact cccgggggac gtcctcctcg atcgcatgc 300

atgtccagga ggattaatta ttggcaggca ctanatgagc tagctagcta gctagggcca 360
aaagatgtat acttctcgcg ggggggcatg taagtaacaa agtcatatat ctgtgcgttc 420
ttttttgtgg aatcaaacta atttcgct 448

<210> 6793
<211> 135
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-G3
<400> 6793

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gtacaattcc tccct 135

<210> 6794
<211> 412
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-G4
<400> 6794

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gcagctgcgg tggcaactgc aattgcgacc cctgcaactg ctgatcacat cgatcgacga 180
ccatggatat gattattatc tatctagctt gtggtggtgg ttgaacaata ataagcgagg 240
ccgagctggc tgccatacat aggtattgtg tgggtgtgtg gagagagaga gaaacagagt 300
tcttcagttt gctatctctc tctgcatgtt tggcgtcagt ctttgtgctc atgtacgtac 360
gtgtgtctac ctgcatgttg gttgatccga ttgcatctgc tgtaaccata ta 412

<210> 6795
<211> 368
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-G5

<400> 6795

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agtgatatcg agcgccccgc gtgttgtgcg cgcgtacgta tgtatgcgct cgtgtgatgc 180
acgaataagc gtggctacgt aatctatcgt atgtatacgt gtgtgtatgc atgtgcttgt 240
gtatgatcgt ggtacgagga ccgaaaaaat gtatgcaact ctgatttact tacatgttta 300
gttgtttacg tttcgccaaa agtattagta cccattatgt tatattttac taaaaaagc 360
gaacatgg 368

<210> 6796

<211> 309

<212> DNA

<213> Zea mays

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<400> 6796

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caaagcgtagc ttacagaaa ctggaagatg taaaaaaaac tagataacag acagaaaaca 180
tccaaacctc ggcgggcccc ttaaaaaacc ccccaaaaaa cccaacaaga tgcccaaac 240
caaaaagggg agggaaaaaa aaaaggagaa aaccccgga aaaaaaacc aatccaccaa 300
aaggggttt 309

<210> 6797

<211> 207

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-G8

<400> 6797

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ctgctgcacg gtcgacatgt gggatgtgca gtacttcaaa ttcaaggaat gcatgtacac 120
ggacaaggct actaccggct tggattgtgt ctgtcacttg ttcgtcagca tgtgaatgtt 180

tctcggcttc aacgacgtaa ttttcac

207

<210> 6798

<211> 139

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-H1

<400> 6798

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tatgatctac tggttaattct tcgaccttc aatttcacaa aacttgcaac tatttttatg 120

ctctgcatcc taccaaaag 139

<210> 6799

<211> 335

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-H3

<400> 6799

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ccctgaatct cacctgggca ctgtgacgga ggctgagcgc agttgaaatg aggcaagagg 120

gatgccgaca attttctgta gatcttcaga cagataccac tcatactcct attttaattt 180

cagaatccac tgggtgcgaat tgttctttgt agtaccttgt gcatatagtt ttatatagag 240

ctgctacaca agctgctgta aatttctggg aggcactccc aactgtagat tactgcaatt 300

catctgtaaa tttcaatctt gttcaagaaa aatga 335

<210> 6800

<211> 349

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-H5

<400> 6800

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gcaagcacgt acgttgtcgg aagctcaagt tagaagaagc accagtgcct gatcgatggc 120

ggcccaggct ctctctctcg gccggcagct gctggggccg cccgtgcagt cggccgtctc 180
taggtcgtcg gcgaggaagg cgcccttcgt cgtcagggcc agctccagcc ctccagccaa 240
gcaagggtgcc gacaggcagc tgtggttcgc gtccaagcag tccctctcct acctcgatgg 300
cacgctgccc ggcgactatg gtttcgaccc gctggggctc tcggacccg 349

<210> 6801
<211> 372
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-027-Q1-E1-H6

<400> 6801

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cggcagccgg agtgtggcgc ggtgtggcgc ccgagccagc ccaccaaaca ggccttaga 180
tagccaaaac gcagtacaca cagcgtgct taccttgacg acgaccactt gtgttggagc 240
agcagtcac tacagccaaa actcttcact tccttcgcca ttgccgtgtt accagcccag 300
ccagcgacgt gggcgtgccg cgacagggtt ttttccccct gggaaacgtt gtgttctggc 360
anatgccaca aa 372

<210> 6802
<211> 284
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-A1

<400> 6802

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acggttccaa cctcacgcac tcagttcatc ccgttacacg catactctca ccgatgtaat 120
acgaccgcgc ttgggacaca cctccagagg tgggagtata gaattatcac ttcggaccat 180
cagcaggccg attcgtaact aagtatggca cgtccccagc atcgcaatct gcaatcgaac 240
tggacacagc cgtggacgtg aaaaccacaa gtggctgtcc aagt 284

<210> 6803
<211> 353
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-E7

<400> 6803

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gccgtcgtcg tccgccttcg gcgaggcccg cgtgacgatg cgcaagacgg cggcgaaggc 180
caagccggcg gggcggtccg ggagcccggtg gtacggcccc gaccgcgtgc tgtacctggg 240
cccactgtcc ggcgagccgc cgagctacct gacggggcgag ttcccggggc actacggctg 300
ggacaccgcg gggctgtcgg cggaccggga gacgttcgcc aagaaccggg agc 353

<210> 6804
<211> 354
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-E8

<400> 6804

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atgctttcca gctcattgga atgtcctcct gccttgatct atccggattt ttgagaaa 120
aggatgtttc tgaaaggaaa atcagatttg catcaaatta ttcccagct tatttatttg 180
agaagattga gagcattgtc agaaaaatgg ggttccaggt acataagagc aacggcaagc 240
taaaagtgat ccaagactgc aagggactag caaattcaag agggcaagag tcattattaa 300
tttctgctga ggtgtttgag atcaatgaat ctctttatgt tgtcgaacta aaga 354

<210> 6805
<211> 338
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-F1

<400> 6805

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tattgatgaat cacatcaagc gatgttcac tgcgtgtcaa atgggtgggt aggtttgaag 120
gtcatttgtg gaactctcat cacattgtcc ttcttccgaa aactctttta gagttcgctc 180
agttcgctag ctttaagcgc tgtgatgcat taagatattc atttgcgcta tcttttgccc 240
ttgcaatagt ttttgtcgat atcgctgatg caagttccag ctgcatccac ttctttggaa 300
atgttttagag ttccaaactt tttcgacaat tagatggt 338

<210> 6806
<211> 416
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-027-Q1-E1-F2

<400> 6806
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gcgagggagg aagaggcgag gagaagatgc agatcttcgt gaagaccctg acggggaaga 120
ccatcacctc cgaggtggag agcagcgaca ccgtcgacaa cgtcaaggcc aaaatccagg 180
acaaggaagg gattccccca gatcaacagc gactgatatt cgctggcaag cagctggagg 240
atggacgcac gctggctgac tacaacatcc aaaaggagtc aactcttcat ttggtcctca 300
ggcttagggg tgggaaccatg atcaaggatc aaactctcac tgggaaagag atcgagatcg 360
acattgaacc cactgactcg attgacagga taaaggancg tgttgaagag aaagaa 416

<210> 6807
<211> 295
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-F3

<400> 6807
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gaggaaatgc aaaggccggg taccccgctc tacaacatca aggccttcct ccctgtcatc 120
aattcctttg gtttctccag ccaactgagg gccgcaacct ctggtcaggc gttcccccat 180
tgtgtctttg accattggga catgatgggc tcagatcctt tggaggccgg ctcccaggct 240

gctcagctgg tgctggatat ccgcaagagg aagggtctca aggaacagat gaccc 295

<210> 6808

<211> 351

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-F4

<400> 6808

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caattactgc cccaaacaat ggggcacaaa ggaattgatt aagcccgaca aaacacaagt 120

tccttgctt caaacaaaag gataaaggcg ttaagcaaata taataatggc cccaagcctt 180

aacctaaggc acaggcgctc gaccgtctct tgccgtatca gaggtctgac ttcgaaggca 240

ttttccgtgc tatggatgga ctcccgtga ccatccgact cctggaccct cccctccacg 300

agttccttcc agaagggaaac atcgaggaca ttgtaagtga attatgtgct g 351

<210> 6809

<211> 353

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-F5

<400> 6809

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tcaggcgatg ttcatcatcg tggatatattg gagggctggt ttggagctca tttgtggaat 120

tctcgtgcca ttgtccttct tgccacagct cttttggtgt tcgctccgtt ggtgagcttt 180

aagcgcttgg attcattaag atacacatct gcgctatcag ttgccctggc agtagtTTTT 240

gtcgttaatta ctgctgggat tgccatcatc aaactcttca atggaactgt agcgatgccc 300

aaactttttc cagaattaga tgggtcttaata tctatctgga atcttttttac agc 353

<210> 6810

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-F6

<400> 6810

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aagtttcgca acaggccatt ccctcttttt tatagtttag aagggtata tgaaggtagt 120
gtggctacca gagagttaaa tttcacatca acctttgttg atcttcctcc accttcagct 180
ccattccagg agtgtgtctg gacaaagtct caatcccttg agtactaatt cacttgattt 240
ggatggataa gaaaccacaa gtgtcttcaa tctatcttct gatgttcaat ctgtcccagt 300
caatactaata gaaccactg aagctcaatt tgtcccatct aatcaagaat caagccagag 360
agaaggtggc agtgggagaa agcgttaagc 389

<210> 6811

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-F7

<400> 6811

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ggacaccatc gacaatgtga aggcgaagat ccaggacaag gagggcatcc ccccgaccca 120
gcagcgtctg atcttcgccg gcaaacagct ggaggatggc cgcaccctag cagactacaa 180
catccaaaag gagagcacc tccaccttgt gctccgtctc cgtgggtggc agtaagtcac 240
gggtcgttta agctgccgat gtgcctgcgt cgtctgggtgc cctctccata tggaggttgt 300
cgaagtatct gctgttcgtg tcagtgttgg ttttaataatg gaccggttgt gttgtgtgtg 360
cgtactaccc agaactatga caaatcaaga ataagtttgt tgtttg 406

<210> 6812

<211> 334

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-027-Q1-E1-G1

<400> 6812

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ggaggagcgg aacattaaga agggggatag ggagatggag gaggcgcgca aggaagagga 120
 gcggaaggag gaggcggggg acaggaatac ccaggagccg cagcaaggtc aaggcctcag 180
 cctctcactc gccaacggca ggcacagcgg caggtctgca atgttgccga tgtcgaaccc 240
 ttcagctaat cccacacagc ttacaatttt ctatggtgga tcagtatgtg tgtatgactc 300
 ggtgccacca gaaaaggctc aagcaatcat gctt 334

<210> 6813
 <211> 272
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-027-Q1-E1-G10
 <400> 6813

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 tttcccga tgcctgcaga ctcccatatc ttcacgtcat ctcccgatc tcatacctgc 180
 ggtatcgctt gtaagtgaca actcaactct tcacacctac acgatcgaaa acgcaatcat 240
 caagtggcaa cttatattta acaccctga tc 272

<210> 6814
 <211> 201
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-027-Q1-E1-E6
 <400> 6814

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 agtagcaatg acggccatgg tattttccac cattgtgctc gttggtcttg ctgtatgtgt 120
 tgcgtcggcg accatttttc gtcaagactc agtgactctt atcactgccg ttcttaccgc 180
 aaaccttgca gcagtgtccg g 201

<210> 6815
 <211> 363
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-D2

<400> 6815

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tccaggaaat gtcaatgcag tcgacgagca acctgaccat cagatgggcg ttgagaggga 120
agcctaagaa cccgttgttc gcgagcgctg gaggagacgt catcgctccg gtcgagtcac 180
ggttcgctct gaaccagata agcgggcagg tgctggagca ggccgagtc tgggacctct 240
ccgcctcgtc cctccctgcc caggcctact tctggctgtc ccgaagggtc tactccgccg 300
tggagtccgg gaaggacgag atcgaagccg ccaagagcgc ggcgtcgtct gggtgacga 360
cca 363

<210> 6816

<211> 344

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-D3

<400> 6816

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cgctctcacc ttctccgtca cggctcaa atcacggttc atcaatggcg tcgttctcgg 120
aggctcccc cggaaccgc aaagccggcg agaaaatctt taagaccaac tgcgcgcaat 180
gccagacggt cgacaagggc gccggccaca atcaaggtcc aaacttgaac ggtctttttg 240
ggagacagtc cggatatcact gcaggcgatg ccgacactgc gggaaacata aagaaagctg 300
taatctggga agaacacacg ttgtataagt aacggccaaa acct 344

<210> 6817

<211> 345

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-D4

<400> 6817

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ccacacggcg cataaccagt cgttcaaggc gcacaagaac ggcatacaaga agcccaagcg 120

ccaccgccag acctccacca aggggatgga cccgaagttt ctgaggaact tgaggtactc 180
aaggaagggc aacaagaaga gtggcgaggc tgagtccgag gagtaagatg atgggtgattg 240
agtttgtggc gacaaatgca tctcttgat cgctaagagt cttagctgtg aacttagttc 300
tcacttctgt gtgactgtga tcaaaggact tgtgtatgat caaag 345

<210> 6818
<211> 352
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-D5
<400> 6818

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cgctccctc caggcctact ccacggccct ctccgccttt accgccgcat ggcgtgccgt 120
cgagaccac gctccaccc tcgactccgc cctcgccgcc cgcttagccg gcttctcgga 180
gctcgagctg atctgctcgg cgatggacgg agccggcctc cgcggtacc tcaccgagca 240
cagggacgag ctcaaggatc ccacgcgcgc cctcgacgca gccctccaag ttgcgcccga 300
cccggggctt ctggctctct ccgcggcagc gaggttctgc cgcacgctgc cg 352

<210> 6819
<211> 421
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-D6
<400> 6819

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ggcgtgcgc acagacacac caagcgtcgg caccaatggc ttactaccag gaggtggact 120
actgctcgga ggaggtgagg tcggtggccc cggccggctt cggccgccac ggcgggggcg 180
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gggtcgaaga ggacatcaac acctgcaccg gcgaggtcca cgagcgcagg gagagcttcc 360
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<210> 6820
 <211> 379
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-D7

 <400> 6820

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aggattcatt ttggtacccc tacattaagg aacttgaccg acatcgagga agggggcagc   180
tagctgttga atcaccactt ctatggactg aaagtgaact ggactacctt agtggaagcc   240
ccttgaagga tgaagttggt gctagagatg aggcaataag gagagagtat aatgagcttg   300
acacattgtg gtttatggca ggttcactat ttcagcaata tccttttgac atacctactg   360
aggcttttcc gtttgaaat                                     379
  
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<210> 6821
 <211> 334
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-D8

 <400> 6821

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cgccagcgcc agacctccac caaggggatg gacccgaagt ttctgaggaa cttgaggtac   180
tcaaggaagg gcaacaagaa cagtggcgag gctgagtccg aggagtaaga tgatggtgat   240
tgagtttgtg gcgacaaatg catctcttgt atcgctaaga gtcttatctg tgaacttagt   300
tctcacttct gtgtgactgt gatcaaatga cttg                                     334
  
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<210> 6822
 <211> 365
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-E1

<400> 6822

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caccgccgcc gtggccgttg ccgccagcgt cctgcttgcc ggcgccggcg ccatggccaa 180
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caaggccggc gacaccatca ccttcaagaa caacgccggc ttcccgaca acgtcgtgtt 300
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caacg 365

<210> 6823

<211> 318

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-E12

<400> 6823

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catcgcgagt tcgccatag gatgggttcc aaagcgctt tctgtctcac gctcctcttg 120
ctgctcgccg cggcctgttg acctgctgca catgccaacg atgctgtcga gctcccgcat 180
catggctcag ccttgaagga acatatttct tcaaccaaga ttctgcccg tctcaagagg 240
ggcagcggac tatgctcggc ctgtgaaaac ttcacgagcg aagccgtcac ttatctcggc 300
aaggaacaga cacaggac 318

<210> 6824

<211> 279

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-E4

<400> 6824

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atgatagact taagtttggg ccttcaacca tgcaaggatg gccagcaacc atggcagatg 120

ctcaatcagc aatgccagat ttgaaaacc agacaacaat ccttggtggt tttgaagggc 180
aaggaagaaa aatccttgcc aaattctgtt gcaaaaaacc gcatggtcaa gtcctcaaaa 240
gccaagccca ttcaactggt gacctaggca ctgctgtcc 279

<210> 6825
<211> 344
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-E5
<400> 6825

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aacagcactg gcaaatacaca gtattggaac gatgtacagt ggcattaaaa aaagggttacg 180
tccacataca cgcaggaaac atagtaaagt taaacaaaaa tgtttagagc attgctatag 240
agtcacaat cttgacattt agtcgcatga acacggctgg atatccgata agtcgggtgc 300
tgtgctgtac gcaaaaatat catatgcaac aaggttcacg gtca 344

<210> 6826
<211> 386
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-C8
<400> 6826

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gagatcagaa aaatgcaggc tgccgcaact gccgccgggt tctcggcctt gctgcccgcc 120
aagggcaggc cggcggcaag gaccagggtg gtggcccttg tccccgccac agggaggacc 180
ttctgtgtac ctgctgtctt cgagaccgag gccgcacata tcgactacag ctcaagcgtc 240
tcgggtgtcc cgatggaggc ctgcaacctg cttggtggca acgcgtgcaa cgggcccattg 300
ttccccgagg ccaagcccgc ctcggcggcg gcggcggcga gcatgagtgt ggccgggggtg 360
gacagggact acctgtccta cgacga 386

<210> 6827

<211> 369
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-B11

 <400> 6827

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caaggagctg tgcaagaaca tcaatcctga tgaggccgtt gcctatgggtg ctgccgtcca 180
ggccgctatc ctcaagtgtg agggcaacga gaagggtcag gacctgcttc tgctggacgt 240
cactcctctc tctctgggtc tggagactgc cggaggagtg atgaccgtcc ttatcccgag 300
gaacaccacc atccccacca agaaggagca ggtgttctcc acctactcgg acaaccagcc 360
tggtgtgtt 369
  
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<210> 6828
 <211> 386
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-B2

 <400> 6828

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gggggaggggc gagtctttat attgaatgaa actacataaa atagcatgcc gtctctgtca 180
ctggcaatgg acggtggtgc ctagcgcaac tcagcgaca actgtgtgtc ttgatttttc 240
ttctgtttat cacggcatta gtgccatgcc gttttatgtt acagtgttgt gtgctcgcaa 300
gcatccgaaa atatgctct gagtttaggg ttgggtcaaa cttgtcgaat ttggggttct 360
gttataatat gttgagcatg gataaa 386
  
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<210> 6829
 <211> 370
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-B3

<400> 6829

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ggcccaatta acagtcaggt gcatgaaact gttagctctag aaaatgtgga aatgaaagat 120
gatgtttctt ctgctgaaaa tgagcataac agatcgagca gccctgttat tcatttagag 180
gaccactag tgtctttgaa ggatgttgag cagcatgggc caactcctac taaggacttt 240
gttgtagcta acacagaaga ccaacaagaa gccagagata tcagcttgca ggtacaagct 300
gtggattcca tgaaagattg tggcgaagta ccagatggaa caatagaggc ttcgacgaat 360
gatgatgaat 370

<210> 6830

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-B4

<400> 6830

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ggcgcgccat ggtgggcaaa ggcaaagacg gcgagttcgg gttcgccacc gtccgcgagg 180
gcatgccgct ggtgcggtcg acggtgtacg agatgctgcg gatgcagccg cccgtgccgc 240
tgcagttcgg gcgcgcgcgc agggacttcg tgctgcgctc ccacggcggc gccgcgtacc 300
aggtgtccgc gggcgaggtg ctgtgcgggt accagccgct ggcgatgcgg gaccc 355

<210> 6831

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-B5

<400> 6831

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gacgcgatcg acagcgtggt ggatcccctc cgcgacttcg ccaaggacag cgtccgcctc 120
gtcaagcgct gccacaagcc cgaccgcaag gagttcacca aggtggcggc gcggacggcg 180

atcgggttcg tcgtcatggg cttcgtcggc ttcttcgtta agtcacatctt catccccatc 240
 aacaacatca tcgtcgggtc cggctaggct tacaggagta cagggcgact agcatgggag 300
 tagtgcaata cttttgggag caatagataa cgaggatcct ggtctttcga atagtattgt 360
 taatgaaatt tttccgt 377

<210> 6832
 <211> 315
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-027-Q1-E1-B6
 <400> 6832

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 ccgtcgccgc cagatccgac gcgctggatc gccagcggcc tgctgctgtc gatccgacgt 120
 gcggcagtct gctcttctg ccgtttctact gcgcttgagg tccataatag cacgcacctg 180
 ggcggggtcaa gagcaaaatg gattcggacg gaagaaggcg ccggtgccgg ctccccctca 240
 acgatggcca aggggtccga aaagaccgac gacttcaaag aaggcgctccg aatcgccgga 300
 atcccccaag ggtac 315

<210> 6833
 <211> 346
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-027-Q1-E1-B7
 <400> 6833

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 agcggcacgg gcaggacctg gcggaccgcc tcgcgcaggg cttctcgggg ctctctctcc 180
 acgcgcagcc gccgcagctg ccccatggt cgccggcggc gctgttgccg cccaagctcg 240
 tcatccccctt cgacctcgac ctccccgttg tcccttctgt cgccgggatg cgccgcgggg 300
 tcgggaccgt ggacctcccc gccgtggccg tctcgtcgtc cgtcga 346

<210> 6834

<211> 365
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-027-Q1-E1-B8

 <400> 6834

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 ccatgtcgaa gcaaggaggg aaggccaagc cgctgaaggc gccaagggtc gacaagaagg 180
 agtacgacga gagtgatctt gcttatttgc agaagaaaaa agatgaggaa aaggcgctga 240
 aggagctgaa ggccaaggca cagaaggggc caattggagg ctcggtctc aaganaagtg 300
 gaaagaaatg agcattgccc acccaccat ctccaaaaca cctaagagaa cgataagaca 360
 gctgc 365

<210> 6835
 <211> 306
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-C1

 <400> 6835

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 gaaggctcca agcgagcaa cttgacaaat tgctcgatgt agtggattca gtttgtgcaa 120
 aaaatggagg aaaaccattt tcagatcaaa tgttcactag catcaaggag gtgcatgata 180
 gagaaaaaga ggtgcatacc tcgggatatt cagatgagca gatatctgaa ttgaaaaagg 240
 agattcatag aactaaggaa gtaaaagctt gggcaaataa ccaacatggt caaggaaaag 300
 ttaaac 306

<210> 6836
 <211> 182
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-C10

 <400> 6836

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 ggaggagtgt tctgatgcca catgccgggg ctgcgtccgg gcccatggag gtccgtggca 180
 ga 182

<210> 6837
 <211> 277
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-027-Q1-E1-C4
 <400> 6837

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 gttaacaagc ctggttcaga ggttgacgaa attagagggtg gtgtagctgg tggcagtatc 120
 ctcaggggag ttcttagggt gaaccagaag attgaagttc gccctggcat tggtatgaaa 180
 gatgagaatg gaaacattaa gtgcacgcca atctactcaa ggattgtctc actctatgct 240
 gagcataatg agctccaatt tgctgtccca ggaaggc 277

<210> 6838
 <211> 317
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-027-Q1-E1-C6
 <400> 6838

gaccacgcgg tcaggcccaa ctcaaatttt acatcaaggc cattcgccgg aaatgggttc 60
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 ctcccgaat tcttcaaagc cgctctcgtg tctcgccgcg gccgcgcgat acgccgcgcg 180
 cgaacagcgc cctgtcttcg ctctcgcggg tatgtctctc ggtggcgcta tcttcatttt 240
 ctcttcgccc tccactttat cgccgtcaga ccccgccgcg tcggtcggct tcaaccatct 300
 tgccatcagg gggcact 317

<210> 6839
 <211> 391

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-027-Q1-E1-C7
 <400> 6839
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 tggccatatt atattttacgg ttgatatacc attgtactta caagaaattg ttagaaaatg 120
 ataggaagt tcccctacca tatatgtaat ataaatatcc aatataagaa cgaaatagca 180
 tcacaagata tgtaccaact cctaaatagc agatgttcaa caagaaattg tggaaccatg 240
 tttgtatcac taacttatat gattttgccca tatggaaaac caaggaaaac tctgccaaaa 300
 ctgtattttt ccaagcatct acttgtttga gatttggctt tacattttat ctttttgttt 360
 gcttccccta attccccttt gggcctaatt t 391

<210> 6840
 <211> 315
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-026-Q1-E1-H3
 <400> 6840
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 aacaacgtaa ggggaggata tgcgaaacaa ggccaccgac aacgagtggg cagacgaacg 180
 aacaaagcgt tgctacatac taccctctca caatgtaaag ttaaatttca caccatctct 240
 gttgctacat actactatag tttctagaat tacaggtttg attaaccttc agattaatct 300
 acatgtatag ccttg 315

<210> 6841
 <211> 409
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-026-Q1-E1-H5
 <400> 6841
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aaaaaaaaaa aaaaaaaaaat aaaaaaaaaa aaaaaaaata aaaaaaaaaa aaaaaaaaaa 120
 caaaaaaaaaa gggaggcctc ccaaaagggtt caaactttat ttaaccgtgc atgcaacttc 180
 aaaccctttc aaaattgtcc ccaaatttca tttcaggggc cttcttttaa aaaattcttg 240
 actggaaaaa cttgggggtt tccaatttta accccctttg cagcaaatcc cccttttcca 300
 aattgggcta attccaaaaa agccccaac ttttccctt cccaaaattt tcccaccctt 360
 aatggcaaaa gggaaccccc ctttaaaggg ccattaaacc ccgggggtt 409

<210> 6842

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-H6

<400> 6842

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 cgaggatgtc ttgcaactgc ggatcaagct gcggctgcgg ctcaagctgc aagtgcggca 120
 agaagtaccc tgacctggag gagacgagca ccgccgcgca ggccaccgtc gtcctcggcg 180
 tggccccgga gaagaaggcc gcgcccaggt tcgtcgaggc cgcggcggag tccggcgagg 240
 ccgccccagg ctgcagctgc ggtggcaact gcaagtgcga ccctgcaac tgctgatcac 300
 atcgatcgac gaccatggat atgattatta tctatctagc ttgtggtggt ggttgaacaa 360
 taataagcga ggccgagctg gctgccatac ataggtattg tgtggtgtgt gtgagagaga 420
 gag 423

<210> 6843

<211> 301

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-H7

<400> 6843

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 cgatggcctc gcgcgcgcgc accctgctca aggtcatcat cctcggcgat agtgggggtg 120
 ggaagacttc cttgatgaac caatatgtga acaagaagtt cagcaatcag tacaaggcta 180

cgatcggcgc ggatttcctc accaaggagg tgcagttcga ggacaggctc ttcactctgc 240
 aaatatggga cactgctggc caggaaaggt ttcagagtct cggcgttgca ttctaccggg 300
 g 301

<210> 6844
 <211> 93
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-026-Q1-E1-H8
 <400> 6844

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 ggcgatttca catatggatt gcccatcaca ttt 93

<210> 6845
 <211> 394
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-026-Q1-E1-H9
 <400> 6845

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 tcccccgcc tccgctcgcc tctctcttctc tctctcctcg ctgagtcgcc gccagccatg 120
 aacaacctcc tcacggattc ctttgagctc ccccggcggg actcctcaag agatgcagac 180
 attgaaatgg gaatgcatca agctgatgct tcagactact taaaagattt cttgaagaag 240
 gtcgatgcaa ttgagagttt aattgcaaag ctgacaaatc tattgaataa gctacagact 300
 gcaaattgagg aatccaaagc agttacaaaa gcaagttcca tgaaagcaat taagcagcgg 360
 atggagaaag atattgatga agtggggaaa attg 394

<210> 6846
 <211> 312
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-027-Q1-E1-A1
 <400> 6846

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 gccatcggaa acagtacatt tgacgtctga ctaaaatctg caatttcacc atgggttttt 180
 aagagctatt ggattgagaa tgttttaatg ccgatataga cacctgtcaa gccgggtctc 240
 atactttctt ggatttgga atcacggatc tgcaggcca tcacatggat gtgcatccgc 300
 taaaaattct ac 312

<210> 6847

<211> 327

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-A11

<400> 6847

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 acgtgcataa gtacgtagat agatacatcg atcgctagct agctggctac catggtgtcg 120
 ctacgctcgg cggtcacaa cgcccatcc atcacagccg cactcgctca cgcagtggtc 180
 agcacgatgg ccatcaccat gtctgccacg cttcgaaaag ggaatgacac cgccactgta 240
 acggttgccg ttaccgtggt ggtagcgtc cggcgagcca tgggccacga catggtgcat 300
 ggacgcaagg cagggccgac tcgactg 327

<210> 6848

<211> 84

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-A3

<400> 6848

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 gggcgacctg cgtggggaca agcg 84

<210> 6849

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-A4

<400> 6849

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aacggctggg ctccaagccg gggccaatcc tcaagaagaa cttcccggcc ggcgttctgg 120
gcaaggggccc cggccaaaaa aagaaccctg cgccggcgaa cggcttccaa aacaagggaa 180
gtcccccccg ttaggtcaac gggatcaaga cgagcacggg gggctctggga tgtgagggcg 240
tcaccgggca agtcacggag gtcaacaagg acaccttctg gcccatcgtc gatgccggcg 300
gcgacaaggt cgtcgtcctc gacatgtaca ccgaatggg cgggccttgc aaagtgatg 359

<210> 6850

<211> 223

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-A5

<400> 6850

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gaatcatggc gtccgtcaac gcccgcgccc cggtagcggc ccttcgcccg ttgacggcat 120
cgctgaagtt cttggcggac ttccttggtc actctaaccg ccaactggcgc aacacgtcta 180
ccatgaaggg cattgtcaag gcagatgcca aaggcgaatg gct 223

<210> 6851

<211> 346

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-A8

<400> 6851

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gaggggcgat ggcggcggct gatgtggagt accgttgctt cgtcggcggg cttgcctggg 120
ccaccagcaa cgagtcgctg gagaatgcct tcgcctccta cggcgagatc ctcgactcca 180
aggatcatcac cgaccgggag acggggaggt ctgcgggctt cggcttcggt accttctcct 240
ccgagaactc catgctcgac gctatcgaga acatgaacgg caaggagctc gacggccgta 300

acatcaccgt taaccaggcc cagtcctcgtg gcggtggcgg tggcgg

346

<210> 6852

<211> 378

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-026-Q1-E1-H2

<400> 6852

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ccaaggtacc ggcttggaa ccccggcggc ttacctgtca aattcaaggc ggctcatcca 120

accaagggtt tgaaaccatt ttaagggaag gatatcccaa acaaggccag cgacaacaat 180

tgggcaaacy accgaacaaa gcgttgctac atagtactct ctaagaatgt aaagttaaata 240

ttcacacca cctgttgcta catagtagta tagttttatg aattacaggc ttgattaaac 300

ttcaaattaa tctacatgta tagccctgcc cagatttaac tatattggga ccgtattact 360

taccgatcaa aanaaaaa 378

<210> 6853

<211> 314

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-B1

<400> 6853

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taacttggcg gcagatgac ggacgttggtg acccacaata gttgacgcat gttcatgtag 180

tttaagtgtt ctcaagttccc acgaccaaata tgacagttac cacatggggg tgtcatgctg 240

attgcaaatt tctacgtggg atacgtgcat tgggtaccac ggattcaact ttattccgac 300

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<210> 6854

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-F4

<400> 6854

aaactccgcc ggccctcccc ccaacgggtcc ctttcccccc caaatccggc gggaaggaaa 60

atggccggct tttccaacct caaggcgggc aatttccctc tcggcttcac aacttggggc 120

gcaacaatca cttcctttgt cctgccggac caaaagggtg gccatagggg gttaattcag 180

gttgatggc cggttaaaaa ttcgtcggc ggcggtgact cgccctacat cacgttgtag 240

taccacagct tcgatggaaa acaaggtttc ccaggcgacc tggacgtgta cgtgacgtac 300

cagctggcgg cccctacgt gctgcgggtg cacatgaacg cgacggccgt gaacaaggcg 360

accccggtga acctggcgca gcacacgtac tggaacc 397

<210> 6855

<211> 212

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-F8

<400> 6855

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aggaaacaag tcaattgaac catggaaaga aatcaaaggc cagctcctct ataagattca 120

gccttagcta ctccatcatg aaacgtcaca tgtcttccaa acagttcgta atttaagtta 180

tcaggccgtc cttttaaacg ttcctaacgg gg 212

<210> 6856

<211> 261

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-F9

<400> 6856

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atgttcgtcg gcggtcacct ggagatgata atcacgtcc tcgtcactat gcttgtgcag 180

cccatcgtgg tctatgatgt cgtcgacgcc tagctccatc agatcaagtg gagcagctcg 240
attatgtggg cgcagatcgt c 261

<210> 6857
<211> 367
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-026-Q1-E1-G1

<400> 6857

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tttcgaagga accctttccg gccttgccca aattaaanaaa ccccttgga aaattcacca 120
atggcccttc ctcccttggc catttaattc ggtgaactt tccttagtta ccttcacca 180
aaaggttcca aataccaat ccaattataa agaactatga cgtcacanag ggcagacca 240
acttcagaaa ttcacgang aagtgaacaa gatcgatgcg tacacacaga ctaaactgga 300
cccgcagttt ttgcttgagc anacaaagaa ggggcttggg attgcttaaa gctgtgacc 360
aaggacg 367

<210> 6858
<211> 400
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-G11

<400> 6858

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gatcgacccc tccgctcgg cggcgtcgcc tgcaggccag gtccggtttc atcgcatgtc 120
gccgcccgtt ggtgcttccg tgcctggga gggagcttcg tttatctttc tgaccgacat 180
gtaatgtgca gtgctaggac tgctgctgca acgcttcgcg atgcaaggac gtcgttccag 240
caggacgatt ctgtttggac tccggaactg cggtttgag ttctgaaggc gaataaattg 300
tgatgaaacc tgagattctt tgtatgaaat acggaatgta tcgcttgga actgtatgcg 360
gaattgggtg atgagcatgt tgtattccgt tgcccttttg 400

<210> 6859
 <211> 286
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-026-Q1-E1-G2

 <400> 6859

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 gaactggttt gtaaaacttg tttccccaac cttgccccca aatcggggcaa ttttttgggc 120
 cccgggcaat tcactttaaa aatccaaatt tgaattgttt aataaaggaa attggttccg 180
 gaacggaata agtcccaaat gatttaccaa agttcaataa taattccgcc ttaaaattaa 240
 atttttccaa aagtttggtta cttggaaatt aatgccggga atttta 286

<210> 6860
 <211> 420
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-026-Q1-E1-G3

 <400> 6860

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 cgccgcctca attaaaaccg gcggctgtgg ttgcaaaaca caacggtttc atcaacggcc 180
 tcggttctat atgccgcctc cgttctatct gccgccgag cagcagccgc agccatggca 240
 atacccact caaccaccgc agctaagccc gtgccagcag ttcggatcct gcggcgtcgg 300
 cagcgtcggc agcccggtcc tgngccagtg cgtcgagttc ctgagggcac agtgcagccc 360
 ggcgggcgacg ccctacggct cgccacagtg ccaagcgctg cagcagcagt gctgccacca 420

<210> 6861
 <211> 257
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-026-Q1-E1-G4

 <400> 6861

gaaggggaac acccccagaa aggccgccgg gaaccataag gaaggaacct tgaaaaaatt 60
cagggccaga ttaaccggca accacgggaa caattccggc aacaacaagg aaaggaaggc 120
caggaaaagg aagaaggaga agaagaagca cggcgagggc cagcaccacg acggcggcca 180
cagtagcagc agcagcgaca gcgactgaga tctggtgtcg cagcacaggt gcaacacatg 240
tatgcttgct ggatgga 257

<210> 6862

<211> 349

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-G5

<400> 6862

agaaaaggtt gatgtattct cttttgggat tggtctctgg gaactgctaa caggagaaga 60
gccatatgca gatttacatt atggtgttat aataggtggc attgtgagca acactctacg 120
gccgccagtg cccgactcct gcgaccccgga gtggagggtca ctgatggagc aatgctgggtc 180
aacagaacca tctgagcggc caaacttcac ggaggttgcg aataggctgc gctccatggc 240
agcatcccag aaggtacaac aactactaagg gaacaccacc ggcacgcaga atttgtccca 300
gggcagcatt cagtcaaact tgcagggttac atccatgggc cgcaaattc 349

<210> 6863

<211> 88

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-G8

<400> 6863

aacacgcgtc cgcgacgcg tgggcggacg cgtgggtaga actagtccca agatattagg 60
aatatatcag gttaaggaga ttagacat 88

<210> 6864

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-G9

<400> 6864

agcgggacgcg tgggggacgg acggtgctgg catcgccaat tcaactccgc atctgcatcg 60
gcagcgcgcc agtccatag tgtaggagga gatggcgctc acaagaatcg gtcttgctgg 120
ccttgcggtc atggggcaga accttgccct caacattgca gagaaagggt tccccatctc 180
tgtgtacaac aggacaacct ccaagggtgga cgagaccgtg cagcgtgcca aggcagaagg 240
aaaccttccc gtctacggct tccatgaccc cgcgtccttt gtgaagtcca ttcagaagcc 300
acgggtggtg atcatgctcg tcaaggccgg cgcgccagtt gaccagacca tcgcgacgct 360
cgcagctcac tttgagcagg gcgactgcat catcgatggg ggg 403

<210> 6865

<211> 419

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-026-Q1-E1-F3

<400> 6865

ttcgacaaa ccttcggcca agccttcggg aaaattgttc cttcccttcc caaagacaaa 60
caagcgaaca caaaacaaaa aagcttcaaa ccaaaaaaac caatccaatt attgggaagg 120
gttccttcct ccaaaaaaat ggggttaaaa aaggggcaat gaacccccaa ggaggacaag 180
gtcttggtcc ccaaaatcaa aaccttcggc caaagcaact ggcgcgcgct gcccaagcaa 240
gccggcttgc tgcggtgctg caagagctgc cggctccggt ggatcaacta cctgcgcccc 300
gacatcaagc gcggaactt cagcaaggag gaggangacg ccatcatcag cctccacgag 360
cagctcggca acaagtgtc cgccatcgcc gccaggtgc cggggcggac ggacaacga 419

<210> 6866

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-H11

<400> 6866

agcaaacaag gaaggaaaag ccttctgata acaagctttt ctggaatggg tgcttcaatg 60
ctactcctag cattgtcctt cacctggaaa gctctggcac cttattcttg tactcttgc 120

gttggttgga ctgttctgta cgtgctgtca ttgctctag gagcggggcc tgttccagcg 180
ctacttcttc ctgaaatatt tgcctcgaga ataagggcca aggtgtcgc attatctcta 240
ggcatgcact gggatatctaa ctttttcatt ggcctgtact tcctgagtgt cgtcagcaag 300
tttgggatca gcaacgtgta tctgggattt gcatcagtat gtgcccttgc agttctgtac 360
atagctggga atgtggt 377

<210> 6867

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-H12

<400> 6867

cccacgcgtc cgcccacgcg tccgcccacg cgtccgcca cgcgcccgcc cagcgcgccg 60
cctccctcct gccgggtcct taataaagag caccagcgca aggtgagccg ccagcttgcc 120
ccaggttggt agagcgagcg agaagaaggc aatggcggcg gagagcttcc tgttcacctc 180
ggagtccgtg aacgaggggc acccagacaa gctgtgcgac caggtgtcgg acgcggtgct 240
ggacgcctgc ctggcgcagg accccgacag caaggtggcc tgcgagacct gcaccaagac 300
gaacatggtg atggtgttcg gcgagatcac caccaaggcg agcgtggact acgagaagat 360
cgtgcgcgac aactggcgcg agatcgggtt cacctccgac gacgtggggc t 411

<210> 6868

<211> 118

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-D4

<400> 6868

ccttogaatc cactggccgc caaggtggtc ccgcgaagcc ggaatggggg cttctccttg 60
tccttgggca acggattgcc gccaaaaaca atggtgcccc caacgaaggc caaccact 118

<210> 6869

<211> 273

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-D8

<400> 6869

cccacgcgtc cgggaccgca cctgcgccgc cggcgtgggg ctggtggtcc cgtcctgggc 60
gccgcagacc caggtgctgg cgcacgccgc cacgggcgcc ttctcacc actgcggctg 120
gaactccgtg ctcgagagcc tcgtctacgg cgtgcccatt gtggcgtggc cgctctacgc 180
cgagcagagg cagaacgccg tgctgctctc cgacggcgtc ggcgctgcgc tccgggtgcc 240
cgagtcgtcc aagcggaggg agattatcg gga 273

<210> 6870

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-E11

<400> 6870

agccacgcg tccggacggc ccagggcatc ggttgctggc cggcgctgtg gggacgcggg 60
cgccggccag ccaaggcttg cagctgaagc tgaaagacgg ccgccgccgc gcgccaccaa 120
ccggagtccg aactccggag aagcgagctt gctttctttc atgagctttc gttcttgaat 180
ctacagtcta caaccgacct cagacccctt gctacctgca cctctgtaaa ataacgccgt 240
cgccgtcgtc gccctctccc tttctggtgt gcgtgtgacg cagcgatctc tgtcgcagct 300
cttgacgtct gaaccgtagc tcctcccgtt ttgagccggc gcggggcgcg ggcctcacgt 360
tccagctgcc gcattgcacg tggtcagaga aagcggacag aacagaaca 409

<210> 6871

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-E12

<400> 6871

aggccaaact aagaaacgcc aagttgccag ccaaacgaac cagctaaaac aagggggggc 60
agcaccgcgg cgcggcgcg cgtggggaca gagccctcgt gatcgatccg tccgtgggat 120
ctcgcgcacg ccaggattgg agagccgcgg cctccccccg cccaaccag ccatgggttc 180

ccgcgcggat cgcggtcttt agacgcggag gaggagagag acagggggag gggaaggccg 240
 aggcctagga ggcggtgtgc agcgcgcgag cgcgttcgtt cggcatggaa cagaacgacg 300
 gctcgttcct cgccgtgcga cgccctctccg gcggcgccat ccaccaccat cgccaccact 360
 cttcgccggg ctgaggtcct ggccgtgtcc acggggtgga tcgggaaggg gct 413

<210> 6872
 <211> 61
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-026-Q1-E1-E2
 <400> 6872

atttcgcggt tcgcgtttcc ctcccttttc tccggtcctt gggttttggc tgttcccgtc 60
 c 61

<210> 6873
 <211> 382
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-026-Q1-E1-E3
 <400> 6873

ggtggtcccc cggacccggc aatggcctaa cggcggttc.cccaaccttc ttccaacctg 60
 ggctctcctc ctgtgaacca ccaacccgc agcagcacgc aaaacgcctc cttgccatag 120
 cgctcacga aagcatcgca gcagctaggg aggangagag ccacttgctg caagagctcg 180
 ctgcagcggg caataataac gaggccggcg gcggcaggac gaggacgtgc gcgctgccga 240
 cgtgggcgct catcggcggc atcacggtgg gcgtgaccgt ggcgctggcc ctgtccgcgg 300
 ggccaggccc cgccctggcg ctggggccag agggccccct gntggaggag ttctgggaca 360
 acatgcggcg gtacgcgctg ta 382

<210> 6874
 <211> 302
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-E4

<400> 6874

aaaccttccc cggcccttg gaaaaaaaaa acacaaaaaa aaaaacaaaa aaaaataatc 60
taaataaaaa caacaatcaa taaaacacca atcaaaacta attaacacat tactcaaaca 120
tcaaaaaata aaaaaaaggc cgcacctcc aaaagtttca aacttttctt ccccttcctt 180
caaattttaa ccctcttcaa aatttcccc aaatttcatt tcccgccctt tttttttaa 240
acttcttaat ggaaaaaccc tcttctttcc caactttacc ccctttaaaa aaaatccctt 300
tt 302

<210> 6875

<211> 153

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-E6

<400> 6875

gacccacgag tccacccacg cgtccgcgtt gacatctgtt tccgtgccgt tactgttcac 60
tgcgacatg agaacctcca ggcaggctcc atatcggtg tccaggactc tggtgggctg 120
gcacgcttca tcattgagga aaatgtcagc atc 153

<210> 6876

<211> 378

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-F10

<400> 6876

ctatagcaac cgggtccagc ctttcacgct cagctccagc aatggctgcc tccaccatgg 60
cgatctctc caccgcatg gccggcacc ccatcaaggt gggctcctt gccgagggcc 120
gcatcaccat gcgcaagacc gtgggcaagc ccaaggtggc ggcgtccggc agccccctgg 180
acggccccga ccggtcaag tacctcgcc ctttctccg cgagccccg agctacctca 240
ccggcgagtt cccggcgac tacggctggg acaccgccg gctgtccgcc gaccccgaga 300
ccttcgcaa gaaccgcgag ctggaggtga tccactccg ctgggccatg ctggcgcg 360

tgggctgcgt cttccccg

378

<210> 6877

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-F11

<400> 6877

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gggtcagggg gtagatacat cagtaacggg aagctgttgt ccagacggcc tcgtggaatc 120
gattccaaga agaggctctg gactaacgct cttcttctc ttaatgtcct ggcttatgtc 180
gctcaggtag catcacaagg aaagcttctt atgtggggag ccaagatcaa cagtctgatt 240
gatagagggc aattttggcg tttggcaaca tcctctctac ttcattgcaa tctcaccac 300
cttgattca attgtttctc tttgaactct attgggcccc tgggtgaaat gttaagtgg 360
cctagaagat atc 373

<210> 6878

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-F12

<400> 6878

ccggcctcga cccaagcgtc aggagaagga agagaaagaa aaaaagaaaa agaagatcac 60
ttagaatacc ttgaggagcg tcgcctcaag gatttgggtc acaagcactc tgagttcatc 120
agctacccca tctccctgtg gactgaaaag acaacggaga aggagatttc tgatgatgaa 180
catgaggaag agaagaaaga cgctgaggag ggaaagggtt aggatgttga cgaggtgaag 240
gaacagaatc aaaactagaa aaagaagatc aaggagggtt ctcacgagtg gtcattgatc 300
aacaagcaga agcccatctg gatgaggaag ccagaagaga tcacagagga acaatacgct 360
gccttctaca aaagcttgac aatgactgg gaggaaccat cgggctgtga tccacttctc 420
tgtggagggt c 431

<210> 6879

<211> 318
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-026-Q1-E1-F2

 <400> 6879

 ggccaagcca gccttcgagg aacctccagc cttataaaaa tggaccgggtt aaaaaagaag 60
 gcccaaaaag aatcccaatt ggaaaacctg gaaagggtta accgaatttg gtcaaaccgc 120
 gaaaaagcac cgggccaag gcggaaaaaa aaaaacctcc ggcgggaaaa atttgaaatt 180
 gcaaaccggg ataatgttta acaagaagcg gatgcatctg agcgtgatga cagcataaat 240
 gatggggaaa tgaaaccaga tgcacacctc gacagttcag aaatggcgta naggtggtan 300
 gagggttggg aggcactg 318

<210> 6880
 <211> 70
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-026-Q1-E1-B8

 <400> 6880

 tggtattgct atcctgccct gggaggaatg gtgggagttt gaagtgacaa aggatgactc 60
 aaatcctcag 70

<210> 6881
 <211> 375
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-026-Q1-E1-B9

 <400> 6881

 acgcccctca cccagccacc ggccatgtcg gtggagacgg agcggagctc caccgagtc 60
 tccggggctt ccgggctcga cttcgaggac accgcgctca cgctcaccct ccgcctcccg 120
 ggctccgcgc cttccgcgcg cgccgcgcgc ggggttccc tgtccctctc ctctctgctc 180
 tctctcgctt tccccgaccc cgaccgcaag cgcgcctcct ccgacgctga ccccgccgc 240
 tctctccgcg tcgcccgcgc ctccgacgct gcaccggcac ccaaggctcg tgtggtgggc 300

tggccgcccg tgaggtcgta ccgcaagaac gcgctcgccg acgccgcggg ctccagcaag 360
gccgccaagt tcgtc 375

<210> 6882
<211> 255
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-C1

<400> 6882

gcgtccacgg acacgtgggc ggacgcgtgg gtctcgagaag ggctccatct tcccaccctt 60
caccagcatc agaaagatct ctgcgcacat cgctgcagcc gtggctgcaa aagcctacga 120
gctcggctctg gcgacccgtc tgctctcccc cagcgacctg gtgaaatatg cagagaactg 180
catgtacact cccgtctacc gcaactaccg gtaatgctgc cgggatcaat tttgccgtaa 240
taaaaaatct atcaa 255

<210> 6883
<211> 401
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-026-Q1-E1-C10

<400> 6883

cggacgcgtg ggcgacgcgc aagccagtgc cgcacccaga ccagatctcc gcgacatata 60
agtcgttcgt ccagctaact gcactgcact gcactgcacg caatggccac cacggcgacc 120
gaggcggcca aggtcgcacc ggcgcaggag cagcaggcca acggcaacgg caacggcgag 180
cagaagacgc gccactccga ggtcggccac aagagcctgc tcaagagcga cgacctgtac 240
caggtaaaca agctgagcgc aatgagtggc tgaatctgac cgggatctga gtctctgacc 300
gcgggggaag aatgatccgc agtacatcct ggacacgagc gtgtaccgcg gggagccgga 360
gagcatgaag gagctgcgcg agatcnnacg caagcaccca t 401

<210> 6884
<211> 184
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-C11

<400> 6884

agattgcaac aacaatcctt ggcacatcta accctacaaa ccattgcaac gcaacaacaa 60
caacaacagt ttctgccatc actgagccac ctagccgtgg tgaaccctgt cacctacttg 120
caacagcagc tgcttgcatc caaccactt gctctggcga acgtagctgc ataccagcaa 180
caac 184

<210> 6885

<211> 407

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-026-Q1-E1-C12

<400> 6885

cccacgcgtc cgcccacgcg tccgcccacg cgtccgctat agcaaccggt ccagcacttt 60
cacgctcagc tccagcaatg gctgcctcca ccatggcgat ctctccacg gcgatggccg 120
gcacccccat caaggtgggc tccttcggcg agggccgcat caccatgcgc aagaccgtgg 180
gcaagcccaa ggtggcgcg tccggcagcc cctggtacgg ccccgaccgc gtcaagtacc 240
tcggccccctt ctccggcgag ccccgagct acctcaccgg cgagttcccc ggcgactacg 300
gctgggacac cgccgggctg tccgcccacc ccgagacctt cgccaagaac cgcgagctgg 360
aggtgatcca ctcccgctgg gccatgctcn gcgcgctcgg ctgcgtc 407

<210> 6886

<211> 418

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-026-Q1-E1-C2

<400> 6886

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ctgaccgtcc gccccggcgt tgccgtggac tccatcgagt tcacctacac cgacacaggt 120

ggccagacgc gcaccgctgg gcgatggggg ggacttggcg gcaacgtccg gaagctcgat 180
 cttggcgacg ctgaatacgt caaggaagtt tctggaacgt acggcgcatc cgaagggtgcg 240
 actaccctga cctcgttgag gattgtcacc agcaccgcca gagcttgggg gccatggggc 300
 atcnagagcg ggacacgttt ctgcatcanc ggaccatcg gcagcagcat cgtgggattc 360
 tatggacgcg cgacgaacag gctcgtcgtc gcgatcggtg tctacctgcg ccaacttt 418

<210> 6887

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-C4

<400> 6887

gggccaaccc acccttcgag tacaagaacc actaccaacc tgccttaaag gataatgttt 60
 ggaaattaga aaagattggc aaggatggcc catccaacaa aaatttaaag gcaattggaa 120
 tcaaaacagt tgaaaatttc ccccggtctc ttgtaaggga tcaccagaga ttacgtagca 180
 ttctgggcag tggaatgtca aataagatgt gggacagcct tggtgagcat gcaaagacat 240
 gtgtcttaaa tggaagcat tatgtatact atgctagaga ctcaagaaac gtgggtgcaa 300
 tattcaataa catctacgag ttcactgggt tgattaccga tgaatagttc atttcagctg 360
 aaaatctcac agacaaccag aagggtctat ctgatgcatt ggtaaagaaa gcatatgagg 420
 actggatgca cgttgtagaa tatgatggc 449

<210> 6888

<211> 304

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-C6

<400> 6888

acccacgcgt ccgcggacgc gtggggtcgt cctcggagag aatgactaca ccacttcact 60
 tcaccttaata atactcgatc tttgccacca gacttcttct gtggtacaag catctatcat 120
 caatcccttt cgcatacaac atacgcagcc atggcgggac caggcgcatc ccgaggctac 180
 atcattaccc tattgacggg ctcaatctc gccggatgga tatcgtctc cttcttcggc 240

ggaatgccac catggacccc tcgtctctcag gatcctgctc tttctcaggc cctacctgaa 300
 accc 304

<210> 6889
 <211> 326
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-C8

<400> 6889

gatccacagc atttgcacac attccacac atctcttaac gaagagggtc ttcttggtcca 60
 tctcggtgtg cagcgccacc ttggtctcag catcgaacac catatcctgg agcgagctct 120
 ttgcggcgat ggctgtgtgc gcggtggaga agagcgcgaa gcccatgggc tggtcgccct 180
 tgaagttgat ctgggacgcc tcgaatctcg ggagccagcg cagcagggtt tgcagctccc 240
 tttccttgac gtctgcaggg agccccgtga tgaagatggt gcggacctcg tccgggccaa 300
 cggtgccagg cgcgccgggg acggga 326

<210> 6890
 <211> 362
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-026-Q1-E1-D11

<400> 6890

aggtggtgcg cggcgtcttg aggggcatca aggagaaggg actcaccaac ttcattccgcg 60
 acgtccgcga cgaaggatac ttcaaatgcc ttctggacgg gaaccttttg caaacgaaaa 120
 tccacaatat tggcgcaaca cttgtaggag ttgacaagtt tggtaacaaa tattatgaga 180
 aactacatga cactcagtat ggaaggcata ngtgggtaga atatgcagag aaaggctcgtt 240
 acaatgcac ccaagtgcct gctgaatggc atggatggct gcaccacatc acagatagca 300
 ccgggggataa gctgctgaac cagaagactg ctaggtacct tgtagagcac aagcagaact 360
 ac 362

<210> 6891
 <211> 395

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-026-Q1-E1-D12

 <400> 6891

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 ggagccgtac gtggcgaccg gtggagctgg agtgcgcgga gaagggatct cagggtat 120
 gccacttcca cggaagcgga tcgtgaaagg gaggaggagg atgtcgccga cgattactat 180
 tccgttcttg gtgtgatgcc agatgcaacc actgaggaaa ttaagaaggc atactacagt 240
 tgcataaagg agtgcacccc tgaccttagt ggggaccacc ctgacgtgac aaacttctgc 300
 atgttcatca acgaagttta ctcggtgctg agcgatccag cacaacgtgc agtgtatgat 360
 gagatccatg ggtacacagc aacagcaatc aaccc 395

<210> 6892
 <211> 316
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-026-Q1-E1-A1

 <400> 6892

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 gctgtacgta tctgcagaga gagagagaga gagagagaga gagagaaaga ttaggtcaga 120
 gaccatgaag caccggaggc cgacggagca ggatgtgtcg ctggcgctgt cgctgagcac 180
 ggactcgtcc acgacgacgt ccgactcggc ggggacgcca ccggcgaagc gggcgcgggc 240
 gcaggcgcggt tggcgggggc ccgtggtggc cacgtcgggg gagggcgagt ccgtctgcag 300
 gacctgcagc cgcgcc 316

<210> 6893
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-026-Q1-E1-A10

 <400> 6893

 agcccacgcg tccgccacg cgtccgcaca ggcagcagct agcatccctc actctcggt 60

Jc675 U.S. PTO
 09/394745
 09/15/99

cctgacctga ccacgagagc aacatgggcg gaggacacga catgcacggg cagcactacg 120
ggcacaacgg cggcgtgaag ggcttcgtgt ccaacctcgt ccacggcggc ggcgcccatg 180
gccatggaag cggctacggc catggccatg gaaacggcta cggccatggg aatggcggct 240
acggcggcgg ccacgggtac cctcctcccg ccgcccggcg cgcgtaccct caccgcacg 300
gcgcctaccc gcccgccacc taccgcgcg actcggcgca ctacgggcac acggggctcg 360
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<210> 6894

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-A11

<400> 6894

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tcttggcgca cctcctcccc tccccctcg ccgcctctc gcagcctcag cttgcggcgt 180
cggcgtgcgc ggccggggac agcgccgcct accagaggtc ctctccttc ggggacgatg 240
tcgtcgtcgt cgctgcctac aggacgccga tatgcaaggc caagcgagga ggcttcaagg 300
acacctaccc agaggacctc ctactgttg ttctcaaggc tggtctggac aacactagaa 360
tcaatccagc tgacatcggt gacatcgctg ttggggaccg tgctcggccc tggttcc 417

<210> 6895

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-A12

<400> 6895

ggttacggtc aggggcccc ggctcgacct aagcgtcagc ggacgcgtgg gcggacgcgt 60
gggcgcaagg gtttgtttca tcatatgaca ctgctcatca atacagtac agtgaagaag 120
atgcacataa gtgggtcagt caccgaaacc atcgaggga catctgcgga gttgatttca 180
tatggctttt aaatcctgac aagtgcagga agccctgaa gaccagctgg aatgaagctg 240

tttttggtat cattaagtac ttctccaag ttgttgcat cctttccgag gagaatgcat 300
 ttgcactcct gaaggcagac agcctttatg atcacatcac atattcaagt ttctaccagg 360
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 tgtggattga acctgaccg 439

<210> 6896
 <211> 212
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-A3

<400> 6896

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 acaagacctt ccgatcaag aagaagctgg cgaaaaaaga tgccccagaa ccgccccatc 120
 ccctactggg atccgcatgc ccactgacaa taccatcagg tacaacgcca agcgccaggca 180
 ctggcgccgc accaagctcg gcttctgagc gt 212

<210> 6897
 <211> 417
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-A4

<400> 6897

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 tcaacctcct ttgcacaac aaggccaagg atttcttgca actgcggttc aacctgcggc 120
 tgcggctcaa gctgcaagtg cggcaagaag taccctgacc tggaggagac gagcaccgcc 180
 gcgcaagcca ccgtcgtcct cggcgtggcc ccggagaaga aggccgcgcc cgagttcgtc 240
 gaggccgcgg cgaggtccgg cgaggccgcc cacggctgca gctgcggtgg caactgcaag 300
 tgcgaccctt gcaactgctg attacaccga tcgacgacca tggatatgat tattatctat 360
 ctagcttggtg gtggtggttg aacaataata agcgaagccg agctgggtgc catacat 417

<210> 6898
 <211> 110

<212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-A6

<400> 6898

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gctcgactgt cagccaccgc cgcgctcctc ctctcgtcc tggctcctct 110

<210> 6899
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-A8

<400> 6899

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ttagaacaga acaaatatca aggagtacgg acaagaagaa attttttagct cttcttggct 120

tcgaggtcct tgtggttgct ttctcctccg ttctctggtt tatgttcaaa gatggctacg 180

ttgataccag cggatccagc tttgaatctt ggacgttcgg gatgctctgg gataccacag 240

tttcgtttcc ttggatacca gcattgtaca ctggagttct ttctacggtg ttatgcatgt 300

gggcagagat ggtggcgatg ggcgatgttt cagcaaccga aactgcagtt gtttacgggt 360

tggagccagt ttggggagct gcttttgctt ggttcctcct tggtgaaaga tgggatgacg 420

ctgcat 426

<210> 6900
 <211> 394
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-A9

<400> 6900

caaccaaacc cgcacgacac gacaccaagt cgaggagctc gagggcacca atcatggccg 60

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cctcatcgcc ggccaagcgg gtgcagctgg ccgcgcccga gggccgcgc gccgctctgc 180

tgggcctggc ggccgtcttc gccgtcacgg ccaccaccgg gtcggccaag gccacgatct 240

tcgatgagta cctcgagaag agcaaggcca acaaggagct gaacgacaag aagaggctgg 300
ccaccagtgg cgccaacttt gcgcgcgcct acaccgtgga gtccggcagc tgccagttcc 360
cctacaactt cactgggtgc caggacctcg ccaa 394

<210> 6901
<211> 257
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-026-Q1-E1-B1
<400> 6901

agtaatttgc tatttttcct cgttctttgt ttttgtactt attgagaatt gatgcctcgg 60
attctctgat gtatgtatga ttgggctcag gctcagggca ctttgccatc cctattttgt 120
catttcggtt cttccttagc gtggaacgta atgagtgtga gaaagtaaaa ttggtgaaag 180
tgaaaatggg aactgagagc aaaanaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaaa aaaaaga 257

<210> 6902
<211> 339
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-026-Q1-E1-B10
<400> 6902

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catggccctc tcctccacgg ccttcgccgg caaggccgtg aacgtgccgt cgtcgtccgc 120
cttcggcgag gcccgctga cgatgcgcaa gacggcggcg aaggccaagc cagcggcggc 180
gtccgggagc ccgtggtacg gccccgaccg cgtgctgtac ctgggcccac tgtccggcga 240
gccgccgagc tacctgacgg gcgagttccc gggcgactac ggctgggaca ccgcggggct 300
gtcggcggac ccggagacgt tcgccaagaa ccgggagct 339

<210> 6903
<211> 382
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-B11

<400> 6903

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ggacgggttc atggaggteg gcatctggga gtgagctgga ggccccgcca tctaaacaca 120

aatcaaaatc agtgtgcgtg cagctgcatg tggccatcct gcgattgcca tgtgtttaat 180

ctccgggtca caggtgttgt cgatgatcca ccactagtag tagcgattgc atggagattg 240

gtgctcgggt caataatgat ggtgattgtg acggagtgcc ctgcaaaata attaataatt 300

cgtgtgaaaa agttgattaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360

aaaaaaaaaa aaagagcggc cg 382

<210> 6904

<211> 480

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-B2

<400> 6904

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ccggaatctt ccaaaacaac cgggtgtccc caaatcccc ggcgggcaaa accaacttcg 120

caacccccat tcaaaacaat tccttttgca accccaacgg tcctccaaaa aattaaccaa 180

aatgttttgg aaaaggatcc ccatagataa acttgatcaa agctgcaact attgaaaaaa 240

atatccccca gatctactac taacaagcgc aagaagagaa catcaccaaa agttggtegt 300

cttagagcaa actggaatag tggactagaa aagggtttag ttgaaattct tcaagatcac 360

aacaatgatt gttataaggg tcaaaatggg tgggtcaaccg aaacaatgga taaaattgtc 420

aagttattcc atgagaaatt tcctatgtca catttacaaa atgccaaatc caagataaag 480

<210> 6905

<211> 260

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-026-Q1-E1-B3

<400> 6905

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ccaaaaaggc cattcgggtc ccccggaaga accccccgc cttggcccaa cggaagcctt 120

cccggcaact tcgngctttg atccctgggg cctccgattt gaccccgaga gcctgcgggtg 180

gaacgtgcag gcggagctgg tgcaactgcc gtgggcgatg ctgggcgcgg cgggcatctt 240

catcccgag ttcctgacca 260

<210> 6906

<211> 417

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-026-Q1-E1-B4

<400> 6906

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agccttaaag gtcggcgaac caaaaaatgc gcccaaaaac gacatccgga aaacaaggcg 120

cctcccgggc cttaagggtc actttgcggg aaaccgcgta gaaacaatca aaacgcgcgt 180

gcaaagcccc gactacaata aactatacac aaatggcgcc gacgcaaaag tcagccgggtc 240

gaagtttcgc ggggtataac aaggaattgg aagtgttaact ctggcgacat tgcctttctt 300

aggagcattc ttcacgacgt acgaaggagt gaaatctatc ctgaaagaca aaantctaaa 360

tctggcaatg gacacttgct tcgtcaacag tcatccactc agttgcctct gcaaccg 417

<210> 6907

<211> 332

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-H8

<400> 6907

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ctctctctt cccagacatg gctggcgcgt ctctctccct ggagctctct cgactgcgcc 120

atctccagct tctcgcagg gacgcgcgca aatccctcaa gcttccctcc atggcgctcc 180

caatttcaag cgctcggagc tccagctcaa ccgaccgcc ggcaccaatg cgcgcctcag 240
gctcctcgcg gcctcgctgg gcgggatctc cctccagctc caatccccctc taccgcgcc 300
ctctgcttgc cgcgaacgcg cgccgccgcc ct 332

<210> 6908

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-G10

<400> 6908

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cactggctga gcctcgctgg gagcatctgg ctgcagaccg tcaaacggcc gaacgccgac 120
ttccccgtgt actcgctcca gctcaaagag ctgaagcaca tcacgcaggt gcagctcaac 180
ttcctggcgt tcgcgtcgga cgcgggcaag ctcttcgggt ggttctccgg ggtggcgggc 240
ctgtacctgc cgctgtggct cgtggccttc gtcggcgccg cgcttcggcct cgtcggctac 300
ggggtccagt acctgttcct ggacagcgcc ggcctccggt actggcacct gttcctgctc 360

<210> 6909

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-G11

<400> 6909

agccaacacc ttccggccaag cctccgaaat tttaagaaga tgatacaaac caagggcaat 60
tccaatgcat ccaatgtggc aaaagcaagg tttgttgcaa aggaaacttc ctccaatggg 120
ttaaatttgg attctggcaa tccggtaaac cccgttataa ccaacaattt ttggagaact 180
caatgaagca aaattgcccc atctgttaag agtatctatt tgactcatta caaggaacaa 240
gagttcttaa ctgtggacac acaatgcact tgacatgttt tgaagaaatg gtggcgcata 300
aaaatacac ttgtccaata tgctctaaaa cagctcttga tttgacacat cattgggaaa 360
tgttggatca agagatcgaa gccacgatca tgc 393

<210> 6910

<211> 162
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-025-Q1-E1-G12

 <400> 6910

 gagaataaat ttggaacaga agcccgcat tgtaaagttt catgcccttt gtgctaaaaa 60
 gaatgggagg gacggtttag tggtacttgt gggaaacttt aaccctaaca aaggattggg 120
 tgatgtatta atagattgag ttagttgggt ctgacataca ca 162

<210> 6911
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-025-Q1-E1-G2

 <400> 6911

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 gatcaacatt ggccacttgg atgcgaatgg cctgtatgat ggtcacttca caacatttgc 120
 tctctctggg tttgtccgtg ctcagggcga tgcagacagc tccttggaca ggctgtggca 180
 gaagaagaag gctgatatca agcagtagat ttacatcta gtttaccaag aattggacac 240
 tgccttagct atgttttgaa ttcattgtcac tatatgcaat gttgtgattt cagctgggtac 300
 cttaaactcg aagatttagt atctttgttg ggttccttct gagtttgatg tgtgggtgtc 360
 gtttaattcc cctgtacaac ccaatttagt accattgtga atattttgga ttc 413

<210> 6912
 <211> 361
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-025-Q1-E1-G3

 <400> 6912

 agaaaatcaa gatctcccg gaggtttttt gacctagttt atcatgaaaa tgcccggtgtt 60
 ctactgcatg atgagagcat ataccgattt gaatgttgct caagtccgac aaggttgtct 120
 attcagctga tggaatatgg tcacgaaaag ccagaagtta ccgcagtatc aattgatcca 180

aatttttctt cgtatctttt tggcgagtat ttatgtagta cgtcagacaa gaaattatct 240
gaaggcgtct aacttgcaag gaataagcgg aaataatcag ataatgatga accttcagat 300
ttttttgaag gaatggatgg tatcaaagtt gtgaatggtc tcgaatgcaa gatatactgc 360
a 361

<210> 6913
<211> 263
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-025-Q1-E1-G7
<400> 6913

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ggagcacggc ggtgctgccg cccaccgccc cgggcttcgc aaagcctaaa ccttgctctgc 120
aactccttgg caacaaccgc cgccgtgcct gctgcgggag catcagcgcg cggggggcgc 180
ccgaggacag cgccgcgcca acgcccacgc gtcccgaatg gggctcgttt cgcgcgcaac 240
tctaattcaa ggagcaactg ccg 263

<210> 6914
<211> 371
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-025-Q1-E1-G9
<400> 6914

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acaaccact gcatgtcaag ttctgaaga acatgttacg ggtggtcctc aataacttgg 120
gccccaacct cctctctccc ggcaacgcc ggcttgctcc caagacaacc cctgagaagt 180
acaggccccg ggcgcgcgaga tccggccggt ccaactgcctg ctggccctgc tccttgccgc 240
tgcagtcgcc aagctgcgtc gcgtgggccg gcccaaggac gtgtacctcg tggagtacgg 300
ctgcttcggg cccaagccct ggttcggggc gcctttcgcg acgtgcctgg agcacgcgca 360
cctgatgccg t 371

<210> 6915
<211> 356
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-025-Q1-E1-H1

<400> 6915

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catcgtggcc agcggcctcg cccgccgctg cctcgtgcag gtgtcgtacg ccatcgggtgt 120
gccggagccc ctgtccgtgt tcgtcgactc gtacggcacc ggcacgatcc ccgacaagga 180
gacctcaag atcgtgaagg agaacttcga cttcaggccc gggatgatca gcatcaacct 240
cgacctgaag aagggcggca acaggttcat caagaccgcc gcttacggcc atttcggccg 300
tgacgacgcc gacttcacct gngaggtggt gaagcccctc aagttcgaca aggcatt 356

<210> 6916
<211> 284
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-H10

<400> 6916

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caaaacaagc acgattccta gtcctggaaa gttaaaacca ggcattccatt cgatcgtcgt 120
cgacggctctt agtaatagct acttattttg cagtgggcga tgaaagaatg gtgtcatgta 180
aatgtagctc cagtcgtgtc gcattctttg atttgttgtt tcagcagcac cggatgtaca 240
agtactgagt ttgggctagc aagaataagt aatctttttc ggcc 284

<210> 6917
<211> 76
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-H11

<400> 6917

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tccgtccacg tcgaca

76

<210> 6918
<211> 155
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-H12

<400> 6918

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gctagctagt cgccggcggg cgcccggtg agcgaggcta gctgctggcg cgccggcgcc 120
cgccccggtt ttatttgaca tcatctgggt ggctg 155

<210> 6919
<211> 366
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-H3

<400> 6919

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tggcgtggac gtgggggagc acgcgcgcga ccggccgcc gccgccgcg gcggcggcgg 120
cggctgcacg ctgtccgcgg cgtccatacg gaagaaggcc atcgagggtgg ggtcccgcgt 180
ggacgcgctc cagaccggca tgggtggtccc gccgccgcac caccgcgagc gccataggca 240
ccacaaccac ctgccgcagc tgcgggtgca cgcggaggag cagcaggagg aagaggagca 300
gaagccgcag cggcctgcgt ggagcgggcy cgtcaagaac ccgatctga accgtgcgcc 360
gagccc 366

<210> 6920
<211> 201
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-H4

<400> 6920

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aaaggtggta acataagttt aaacccccca aaaataacca accaacggtt ggatggaaca 120
 acccaaaagc aataacccaa ggtaaccaa cgttacaatt ccaaaaacca cccaattcaa 180
 ctggccttaa cccaaaatcc t 201

<210> 6921
 <211> 188
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-025-Q1-E1-H6
 <400> 6921

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 agaagaatcc ccaaaaaggc cctctcaacc caatttaagg aaccctggag ccaaaagaag 120
 cttggttcca agccccccaa ggaaccaacc tccggaacca aaaacggggg ctccttcgga 180
 accccggg 188

<210> 6922
 <211> 362
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-025-Q1-E1-G1
 <400> 6922

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 ttatgtaact ggcaagccaa gctgctgctg gtacaggga ccttcaaagg aaggaaaaat 120
 attgcctggc aatggcaatg gcagtcaccc gacctggcaa gaatggaaga tgatgatggg 180
 gctatggaca aataatttac ctattccttg tgttcgcctc tactgacagc aatcaatcga 240
 tcatttacag tgtgtgtttg tgtagattaa ccttggacac gacaatacct tgtttttgtt 300
 cctatccttc ctcaacaaca acanannaac aaaacaatga aagaaatgaa tcttgccgcc 360
 ac 362

<210> 6923
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-E2

<400> 6923

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ttttattcgg ttcaggttgc agtcatgaat tctgcatcaa atgtgctctc tacctctgct 120
caaccagcaa catccgtgtc gagttcacag gccacactgg gtccatcccg tgccctcttt 180
gtcggaaacgg cataatgtct ttcaccaagt taccaagcac accaacagaa gggcttaaatt 240
caggttcagc gctcacattc tgcaacccat gcatactgaa caccgggtcc atggactcgc 300
cagccacttt ctccaaagcc gaaatcagac ggaaccgtgt ggcagctgtc tcttcggagc 360
tggtctgtcc aatcaactgg aaccaattc ccgtcgtccg cctcccaac ctgcaggtgc 420
agcgac 426

<210> 6924

<211> 265

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-E3

<400> 6924

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ccatgacgag ctatagatcc tgtattcttt tgaaatctgc acgatattgg atgtctgtct 120
acggagagcg cacgtgcaaa acttgatatgt tgtactcacg gatgaagctg aacctgtgat 180
tttggcgatg ggtagagatt ggccatcgcg tctgtaacta aatttccacg ttgcgatgca 240
atatgagctg tagtactgtc ctgc 265

<210> 6925

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-E9

<400> 6925

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tcccatccct ctccaacgca ccacctcgct tacgtctcaa gcctgccacc acaaccgcct 120

ctttgctctc tccctgtccc cgccctgccc ggcacctgcc tgtgctgctg gtccgtcgcc 180
gccgcccact tcgcgccaac gagcagcaag gccaggttca ggagcaagat gacgaggtgg 240
tggacaggaa catcctcccc tactgcagca tcgacaggaa gcagaagaag acgctggggag 300
agatggagca ggagttcctg caagccctcc aggccttcta ctatgaccag aaggccatca 360
tgtccaacga ggagtttcga c 381

<210> 6926
<211> 344
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-F1

<400> 6926
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gggactccct cgtgcgtttt ccaaatacgt caggttgatg gcgatggagg gaccagtttt 120
atgccgccct gcaatgcaag ccaaatacgc tgctgctgct ctggtcaaca actccctgac 180
cagattcggg cagcttgagg ccatttcaaa atacaggaac gtttcaagat tcatttctcc 240
catctctcag ccattctacga agaacaatagg tccatgctgt agcttcagct cgtcttctga 300
tggcaatgga tacatggctg gaaacttttag cgacagtgat gaag 344

<210> 6927
<211> 99
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-F11

<400> 6927
aggccaagc tcccggatg ataacaggca cctggctagt accagaaacc tttgaatgac 60
atacattcac atctaattgtg gacacatata tcaaaggat 99

<210> 6928
<211> 147
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-025-Q1-E1-F12

<400> 6928

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aactgtgttg gtcaacttgc aattttaacc tttccaatcg ccgtttattg tgagttggtc 120
ctatannaaa naannanann nnnanaa 147

<210> 6929

<211> 345

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-F2

<400> 6929

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ggcggcgcc atgagcagcg ggagcgagag cactaccgcc agcaggtggc ccgagctggc 120
cacgctgcgc gcgctggcgc gcgacgccgc ggagcagctt cggctgccgc gggccggcac 180
gtcggcgctc gcgtcgctgc cgtggcgcgg gcgcgaggac cacctccacg gccacggcaa 240
gacggccaag gtgatgcacc tgctgctctg gggaccaag tgaagcggcg agaggccacc 300
gttacgccgg gctctcccgc tggcgttgct cgttttgctc tgcct 345

<210> 6930

<211> 304

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-F3

<400> 6930

ggtactagtt aaaccatttt acacactccg ctctactccc ggaagagacg atggcggagg 60
cgacgccgac gatggtgttc gtctacggca ccctaaagcg cgggttcctt aaccactcgc 120
tctctgtggc ctccgccacc cccttcgtgg gagccgcac caccggccgag ccagcctccc 180
tcatcatcgg ccctactcgt gtacccttcc tctcccccac tcccgctcc gcctcctccg 240
gtcgcgtcgt ctccggcgag ctctacgcc catccccgc cgcgctcgcc gagctcgacg 300
ccct 304

<210> 6931
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-025-Q1-E1-E12

 <400> 6931

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 gcgtgtcgga ggtgggcgac cgcgtgctgg tgggtgaacgt gacgtgcagc aagggccgcg 180
 acgccatggc ccgcgtgtgc cgcgccgtcg aggagctccg gctccgcgtc atcaccgcca 240
 gcgtcacctc cgtcgccggc tgccatcatgc acaccatctt cgtcgagggtg gattcggacc 300
 agacgaatcg tatccagatc aagcacatga tcgaggccgc tctcgcccag ctagatgatg 360
 cctccgcgag cccgccgagc gtgatgaact actattagaa tcggacaacc gtc 413

<210> 6932
 <211> 362
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-025-Q1-E1-D1

 <400> 6932

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 agcgatggcg cgcggcgtgg tgtcggcgaa ggcggcgcg gtcgcgggca agaagaagg 120
 gtcggtttcc ttcacgatcg actgcaccaa gccagtggag gacaagatca tggagggtcg 180
 ctcgctcgag aagttcctgc aggagcgcac caaggtcgcc ggccggcaagg ctggcaacct 240
 cggcgactcc gtcaccatct ctcgcgagaa gaccaagggtc accgtcacct ctgacggacc 300
 cttctccaag aggtacctga agtacttgac caagaagtac ttgaagaagc acaacgtgcc 360
 gg 362

<210> 6933
 <211> 387
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-D10

<400> 6933

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aatggcaacg tcaaacacgg cgcggtatgga ggacggcggc ggccacctgc ggacacatca 120
agaagtggaa tatcatctac cctgtctacc tcaaactcca agaagacggt ccccgagggc 180
ccccgcatcc ccgctgccaa agcctgcccc ggacccacc tgcctcgaga tcgctgactg 240
ctgttcgcac ctcaagatcc ccacgccatc gagttggata aggcgtaccc tcgggatttc 300
ttccaggtgg ggaggggtcag ggtgcagctt aagaaagatg acggctcccc cgtcaatcct 360
gctattaaaa cgaagaagca gctgatg 387

<210> 6934

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-D12

<400> 6934

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ctgtcgtacc cctgggtgttt ggaacctatt aaattatgca taaacgggtt caatatcaat 120
ttcaatgagg ccttctcctc gctgcgcata gcaaactata aggcattcac acggctccac 180
atcaagaaaa acggagacct tgaggtcttc accctggctg tggacaaggt gccaaaggat 240
tggtatgctg attcagactg ggacatggaa cccaagcagc cattccagat gagctacacc 300
aggaaattcc caagcaaatt gagggctgcg tcgggccttg acccaatcaa tgctgtgcgc 360
attgttgacc ggtttgtcat cccgccaacg ccctcaagtc ctacaacacc aggaggctct 420
g 421

<210> 6935

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-D2

<400> 6935

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 ttgcaccaca aggtcgagga tgtcttgcaa ctgcggatca agctcgggct gcggctcaag 120
 ctgcaagtgc ggcaagaagt accctgacct ggaggagacg agcaccgccg cgcaggccac 180
 cgctcgtcctc ggcggtggccc cggagaagaa ggccgcgccc gagttcgtcg agggcgcggc 240
 ggagtcgggc gaggccgccc acggctgcag ctgcgggtggc aactgcaagt gcgaccctg 300
 caactgctga tcacatgat cgacgacct ggatatgatt attatctatc tagcttgtgg 360
 tgggtggtga acaattatta gcgaaggcca acctggctgc catacatagg tattgtgtgg 420
 tgtgtgt 427

<210> 6936
 <211> 381
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-025-Q1-E1-D9
 <400> 6936

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 cagatacgac gcatgcacac aattactagg gatccctcca cagcagcaca ttatttcata 120
 ttttatgccg atcggttgat tcgattggtt gtcgaacatg gtccctggta tcctctttc 180
 cagtaaaagc aggtcatcac tccgactggg tctgtttaca ctgggtgtgga cttctccaaa 240
 aggttgtgtg gtatctcact gattacgagt ggcgaaagta tggagaatgc actacgtgca 300
 tgctgtaaac gtatacagat tgggaagatt cttattcatc cggaagggtga caatggacaa 360
 cagctcatct atcataattt a 381

<210> 6937
 <211> 130
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-025-Q1-E1-E10
 <400> 6937

gtacggtcta gaattcacgg gctcgagcac gcgtcaggcc ggactcgccg cccgcgcccg 60
 agctctgcaa cccgcgcgag ccgcatcaac gttcctccaa agtctctagc cggggccacc 120

gccaccgccc

130

<210> 6938

<211> 408

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-025-Q1-E1-E11

<400> 6938

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gtggaaagct tgagggagca attggttgct gaaatcaggc ggggtgctgaa agctggtgga 120
agagtattgg tgcagagccc tgcaccctca tccagtcaga agcccaacac tgatattgag 180
cgcaagttac tgatgggtgg atttgctgaa gtgcaatctt ctgctgcaag ctgcaggat 240
agcgtgcaat ctgttacagt taaggcaaag aaggctagct ggagcatggg ctcttctttt 300
ccccttaaga aaacaacaaa agcccttccc aagattcaaa ttgacgacga ctctgatctg 360
attgatgaag acagtctctt gactgangag gacctgaaga aacacaac 408

<210> 6939

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-B1

<400> 6939

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cggctgcggc gccctcaccg ccgcgtccat gtacctcgta tggtcgctcc tcgcctccac 120
ctgcgcctcc ggatacgacg acgacgtcta cagcgacgac gaggaccggc tgtccgactc 180
cgagagcccc aagaaggccg gctacgtcat catccacgac gctgacgagt acggcgccgg 240
taagaactag ggctggggat ccgtcttcgg tctcgccggg gggtcagcag aaggattttc 300
gtaataacat ttgcatgatt gcttgggaatt gtgcagtata ctctatgcac ctttttaatc 360
atgtgtgtcc ccgtccgttg ggaaggtaag tcttctgggg gaaaggaaat ttaggttata 420
tgaa 424

<210> 6940
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-B10

<400> 6940

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gggaaaccgt tcatcccgga tttcaaactg gcgttcgagc aattctgcat ccaagccggg 120
gggcgttccg tgctggacga actggagaac aacctggcgc tcaaggattg ggaaatggaa 180
ccctcccga tgaagctgga acggttcccg aaaaagtcca gcagctcgct ctggtacgag 240
ctggcctaca gcgaggccaa tgggaggatc cggcgccgcc accgggtgtg gcagatcgcg 300
ttcgggtcag ggttcaagtg caacagcgcc gtgtggaggg cgctccggtc ggtgaacccg 360
gcggaggaga cgaacccgtg gatggacgag atcgacaggt ttcccgtgga tgttc 415

<210> 6941
<211> 364
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-B11

<400> 6941

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accttcggcc cctccggggg gaacggaacc cccccggga aaaatgccaa tgggtgaagg 120
ggccaacaaa accaaccaaa ctttcaagcc cctcaattgg caatggaaca acttcttccc 180
cccgggcaac cgcaacagta ccgcctcgtc atcgtcaccg caaagcgac cgccgcctcc 240
gcggtcggac tcacgggacc aggcacctcg gatgtgctgc cgtacgtgga ggcggatctc 300
aagcgtccg cctgcgcgt cgtcgaaaaa tccaaagcct ctgcacacag gcgagcgacg 360
ctgt 364

<210> 6942
<211> 398
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-025-Q1-E1-B12

<400> 6942

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cctcaccga cgacaaaat tccccgagtt caaagaaggc ctcaacctcc tccacaaaga 120
acggggaatg gttcctcaag aacaaaggat ctggggcact gtcattgcga ccctggggca 180
aaatcctaca gaagctgagc tcaaggacat gatcaaagat gtcgatgcta atggcaacgg 240
caccatcgat ttcccagagt ttctcaacct tatggctcgc aagatgaacg acaccgactc 300
tgangaagag ctcaacgagg ccttcctgtg gtttgacaag gaccagaacg gcttcatctc 360
ggacgccgag ctccgccatg tcatgacaaa tcttggtg 398

<210> 6943

<211> 358

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-025-Q1-E1-B2

<400> 6943

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gccaggacca acatccccta ttccttcgac atcaagtcgc aggatcgcag cattgaacac 120
atccaatggt cggatgaaca tgctcgtgcc tgtctctccc tgccttagcc cgctacggca 180
gtacaggcag tccaaccgaa gttgcttgcg ctcccctcnc caccagcct attcagctgg 240
agcagccaac tacaatccta tcaacaatgc actctacca acgcgaccaa gcagcgggtct 300
cacagatcca tggctcgaaa tctctcaggt gaaaacgcaa acttttgatt ctccaaga 358

<210> 6944

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-B3

<400> 6944

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gttctttcgt tgtacgctaa tgggcgaaca actgggtattg tgatggattc cggatgatgt 120

gtagccaca cggttccaat ctatgaagga tacacacttc ctcatgctat tctccgtttg 180
gatcttgccg ggcgtgacct caccgaccac ctaatgaaga tcctcacaga gagagggtac 240
tccctcacta cgagcgctga gcgggagatt gtcagggaca taaaggagaa gcttgccctac 300
gttgcccttg attatgaaca ggagctggag actgccagga gcagctcttc tgtcgagaag 360
agct 364

<210> 6945
<211> 433
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-025-Q1-E1-B4

<400> 6945
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ccagcgctgt cgggctcaag cccgccgcgg cagtgccgca ggccgccgcc gcctcatcgc 120
cggcgaagcg ggtgcagctg gccgcgcccg agggccgccg cgccgctctg ctccggcctgg 180
cggccgtctt cgccgtcacg gccaccaccg ggtcggccaa ggccacgata ttcgatgagt 240
acctcgagaa gagcaaggcc aacaaggagc tgaacgacaa gaagaggctg gccaccagtg 300
gcgccaaactt tgcgcgcgcc tacaccgtgg agttcggcag ctgccagttc ccctacaact 360
tactgggtg ccagggactc gccanccaga agaaagtccc ttcattcagcg acgacctcga 420
gattgagtgc gag 433

<210> 6946
<211> 402
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-025-Q1-E1-B9

<400> 6946
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acgtccctaa ggggatgcag agtcttgttt gttccagtgt gggcgtgtgt gtgtgtgtgt 120
tcggcgtcac catcatattg tatcatatca tcgcatcatt ccacataaca ttatgtaaca 180

ccctaaagtt cactcttgtg aaaatgagga aaattctcca atcaaacacc tttccttgag 240
aatattcata atttcaaagt tgctactcca aaaattaaca taattttgtt ttaaactaaa 300
ataaaagata cctaaataaa ctaaattacc ctagagtga aattataaga attatgatta 360
aactatttct taatatataa tctacaatat aaattatatt cc 402

<210> 6947
<211> 107
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-025-Q1-E1-C1
<400> 6947

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ttgcttcata catctcttac tatttggaat ctcaacaaat cccctct 107

<210> 6948
<211> 379
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-025-Q1-E1-C10
<400> 6948

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aattaaaaaa aaacacaaat tataaaacaa aaaaacaaac aagaaaaagg catttgga 120
tgggctaagt aaggatggca ttactataa taatatcgaa gttgagatta ttagcattta 180
ctaataagac tgcatttttt tcattactga acttgatata tacatgactt ttcctctatc 240
tgaagctcga cgtaatctgc tcgaccaacg gagcagaagc atgggttcag aagctcaagt 300
aagttttttt ttgcgacctt ttcctttccc tccctttctc tggcaggatt tcaacgatgc 360
atctggattg ctcgttttc 379

<210> 6949
<211> 405
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-025-Q1-E1-C11

<400> 6949

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aagggaatgg gtacataata aattcaaaaa tttcctttgg caaagttgca acaacaaatg 120

cccaagaact gttagacttg aaacaaagac caaaaactgg gcctcaattg ggccaagaaa 180

taaagaagca agcaaatgaa gctcgtgatt ctacaatatc aatgccgtac agaatacaga 240

gaattgaaga ttttgtagga caacttgaga caggagatct gaaacttaag gtcagagtac 300

tggagtcaga acgtgctgca cgtaaagcta ctgttcttca gatggccacc atgtatacag 360

ccttggtggg tactctcttg aatgttgggg tcacactgaa tagtc 405

<210> 6950

<211> 385

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-C12

<400> 6950

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tccaatttg gccgtccaac ggccaatcc aaaacggaac ccctttgccg tcctaaccct 120

cggccaaatt acaacaactg gcccaggttc aaggaggacc tcgttaatcc cccggtccac 180

cccggaccaa atttcagggc accagtggac ccctactaaa aaaggaagag gatgaggatg 240

ttttcttggt gagctatact agctcgctgc tgctttttgt tacaatgttt gtacggtcgc 300

aataaatgta tggctcgtgtt tgctcgagag ctactcaggt gattttgtcg tgggagcacc 360

aaaagcagaa aagaactggt ttttt 385

<210> 6951

<211> 366

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-C5

<400> 6951

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taggatcgcc tgatttggat ttctgaaact ccagttatgg atttttgaag taagtagtcg 120

aattctgtcc aaatctggac ataattaaag ttagcactg tttgaccttt taaactgtcg 180
aatctcatta tgatgataat accaaagttg tagaggactt tataagcttt ccaaaaagtc 240
ttagtttact atttttggat gcatattttg tgagttatga ataaaacaat tgactactgt 300
gctgctgtcc agaaaatctg cacacgttaa actgattact tagaatcatt cttgcttggc 360
tagata 366

<210> 6952
<211> 410
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-025-Q1-E1-A9
<400> 6952

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accccgagc agttgcagtt ggatctcaga tcggtgatca cataaacaat ggtgaaagct 120
gttgctgtgc ttggtagcag cgaaggtgtc aagggcacca ttttcttcac ccaagaggga 180
gatggccta cactgtcac tggaagtgtc tctggcctca agcctggcct ccatgggttc 240
catgtgcatg cacttgggtga caccaccaat ggctgcatgt caactggacc aactacaat 300
cctgcgagca aggaacatgg agcaccagaa gatgagaacc gccatgccgg tgatcttggg 360
aatgtgacag ctggagcaga cgggtgttgca aacattaatg ttaccgacag 410

<210> 6953
<211> 437
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-024-Q1-E1-H3
<400> 6953

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tcggacaaga aggacgtggt tagctcgaag gcaaaatcaa ccagcgctag gtcgacgccg 120
tcttccccga ccagcgccca ttctctgcct gcgtcgttcg ataaattctc gagtgacatg 180
aaacagagag tgagaaccaa aggagcagag aaatcgccgc cgtcaagggt gtccttgc 240
aaaaaaggct gcgtctgtgt tgaaaggcac tacggcaggg gaagaagtcc tccctgggta 300

attccattag taacaccttg ttgagcttcg aatctgggcc caaggccttg agaagaagct 360
 gggaagggaa agcagatgcg aaggacanag gcaattcgga ttcaaagcct gccaaagctg 420
 aaaagaagtc tgaaaat 437

<210> 6954
 <211> 448
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-024-Q1-E1-H4
 <400> 6954

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 tagggttcct tagggttttg tggaggggcg atggcggcgg ctgatgtgga gtaccgttgc 120
 ttcgtcggcg ggcttgcttg ggccaccagc aacgagtcgc tggagaatgc cttcgcctcc 180
 tacggcgaga tcctcgactc caaggctatc accgaccggg agacggggag gtcccgcggc 240
 ttcggcttcg ttaccttctc ctccgagaac tccatgctcg acgctatcga gaacatgaac 300
 ggcaaggagc tcgacggccg taacatcacc gtaaccang gccagtcctc gtggcggttg 360
 cggtgggcgc ggtggctacg gcggcggtcg cggcggcggc ggcggttatg gtggcgggcg 420
 ccgtgacggc ggttatggcc gcggtggc 448

<210> 6955
 <211> 330
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-024-Q1-E1-H5
 <400> 6955

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 tgatgcagcc ggccaagatc ggcgcccggg cgccctttgc ctcgctgccg tcccgcccg 120
 cgtcgcaact cgctgcagg gcgttcggcg tcgacgcggc cgccgccagg atcacgtgct 180
 ccctgcagga cgtcgccagc aggtgctcg acgccgcgaa gctcgccggc ttcgctctcg 240
 ccacctcggc gctcctcgtc tcgggcgcga gcgcggaggg cagccccaag aggctgacct 300

acgacgagat tcagagcaaa acgtacatgg 330

<210> 6956
<211> 307
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-H6

<400> 6956

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aagcctcggg cccgcggcag tagccatggc ggcgttcctg gcgcctccct gcacttcctt 120
ctatcgctcg tccgcattcc ttaccccctg ttctcgaat cgccggagta cagtgctaag 180
ggcggcgggc gttcgtgggt cagcggtgac gccggcccag cggacggtct ccgctagggtg 240
gggtccaccc aggtcagcgg tggcgacgcc ggcggccagg aaagcgtgcc tagacgagcc 300
tgatacc 307

<210> 6957
<211> 303
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-H8

<400> 6957

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tgtacactcc ccaatgttgg ggaccttca cagcacagac ggtaattaac cgaatttcac 120
gtcgcactgt tcacgtcatt gctctacctc acgatggcct actgcactca tcgcgttaaa 180
ctgagatgcg tcagcttggc aaaggtgtac ttcgcacgga cttcagggag ctcatgtgtt 240
aaatgcttat gcaagggtacc atgatcaggc tgcccagcaa ggcacaattg ttagagtttc 300
atg 303

<210> 6958
<211> 393
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-H9

<400> 6958

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ccctcgtcta ttttggggag ctttcacacc aaacacggtg attaagcaag tttcttgttg 120

agctgttcat gtcattggctc tatccgagga tggcttactg caagcatggg gctacaatga 180

gtatggtcag cttggcagag gtcgcacttc tcaaggactt cagggagctc gtgtgttaaa 240

tgcttatgca aggttccttg atgacgcccc cgagcaagtg aagattgtta gagtgtcatg 300

tggagagtac catacagcag ctatatctga aaatggggag gtgtatactt ggggactggg 360

aagcatgggg cagcttgggc attgctccct cca 393

<210> 6959

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-A10

<400> 6959

agcatcagca gcttctgctt gctctggggg gaaggagaga gagagagagc gagagagaga 60

tctagtagag aggctagtag gtggtcctcg aacgaagatg ttggcgggtg tcagcgggca 120

ggtggtggag gtgccggcgg agctggtggc ggcgggcagc cggacgccgt cgcccaagac 180

gaaggcgtcg cagctggtgg ggcgcttcct ggccgcgtcc gagccggccg tgtccgtgca 240

gctcggcgac cacggccacc tcgcctactc ccacaccaac caggcgctcc tccgccccag 300

gtcgttcgcy gccaaaggac aggtgttctg cctgttcgaa ggggtgctgg acaacctggg 360

tcgtctgagc cagcagcacg ggctgtcaag caaaggcgcc aacgaggtgc 410

<210> 6960

<211> 350

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-A2

<400> 6960

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ttcgggttcg tgggtgagcy gatcgagatg gcggcgctcg atgttgagta ccgctgcttc 120

gtcggcgccc tcgcctgggc cacggacgac cactccctcc acaacgcctt cagcaccctac 180
ggcgagggtcc tcgagtccaa ggtccgttcc cgtcccagat ccgtccatgg ctctgtccag 240
atctgacctg tcctgacaca cctcaccgcg gatctgtccc tccttccccct ctccccctgca 300
gatcatcctc gatcggggaga cgcagaggtc tcgcggttcc ggcttcgtca 350

<210> 6961
<211> 432
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-025-Q1-E1-A4
<400> 6961

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cgccttcgtc tgatgaaagg ttcagaggcc gtgaacttgg caccaagagc cgcccgatga 120
ggcacactcc gttgggcgtt ggcacgcacg cacgcactgg cgtcttgaag gaaaggggga 180
actctgctgg tcttgatgag gatcttcacg tgagatanga acgtgtgtac agttgtcccc 240
ttatggtatt gagttgagga aacttgaag ttccattact tgtctgtagt ctccacttta 300
tatagatgcg ataagcttga gatacacatt gcctacaatg tcttttgatg aatangacca 360
gacagcaccg aaccggaact ccgtcctcca cacgggttgc tttgccatct cggtgggtttt 420
gtgggtggtg tg 432

<210> 6962
<211> 146
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-025-Q1-E1-A8
<400> 6962

cgaccacac gtcagccac gcgtcagcca actcattatc ctacattttc tgggtataat 60
ttctgtatca tgactgatcg gttcatggtg tcaatgccat ttgttctgga tacactcagt 120
ggatgcttaa agctgggttca tttgtt 146

<210> 6963
<211> 372

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-024-Q1-E1-F8

 <400> 6963

 ccaagttgcg atcggggggac cgggtggaaa ccctttcttg gggcaacaga tgtcaagcca 60
 gaaggactac tctatggcaa cagcggatgt tgtggacgcc gacgtgaggg aactcgtggt 120
 gaaggcctac tctagagcaa ggcagataat caccacgcac atcgacatcc tccacaagct 180
 cgcctagctc ctgatcgaca aggagaccgt ggacggggag gagttcatga gcttgttcat 240
 tgacggccat gccgagctgt ttgtcgcttg agatgtcaca aggcttgagg tgcgtatgct 300
 tatcggtgta ttgtgtcaga gcgagcaatc acaaagcaat ggagagccca gcttgtagga 360
 accacatcga tg 372

<210> 6964
 <211> 380
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-024-Q1-E1-F9

 <400> 6964

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 cccccaactc ccaacccaac ccctactcca gctagctcgc ggcggcggcc aacggccatg 120
 gcgttcgggc tgagcaacaa cctgatcggg gtcttcaact tcgtcacctt cctgctctcc 180
 gtcccgatcc tgggcgcggg catctggctg ggccaccgag ccgacggcac cgagtgcgag 240
 cgctacctct cggcgcccggt catcgcgctg ggggccttcc tcctcgccgt ctccctggcg 300
 ggcctcgctg gcgcatgctg ccgcgtcacc tggctgctct gggcctacct cctcgccatg 360
 ttctgtctca tcctcgctct 380

<210> 6965
 <211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-024-Q1-E1-G1

 <400> 6965

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 gatggaattg agctgcaatt cgcaacgaat catgttggcc atttcttgct gacaagtctc 120
 ctgctagaca agatgaaatc aactgctgca gagacaggtg tgcaggggaag gatcataaac 180
 gtatcatcgg tcgcgcataa aagaagtgat ggtacatgct ttgagctgaa caagctaaac 240
 gataaggcta ggtaccaacc gttcattgca tacgcgcatt cgaagttagc caatgttctc 300
 cacacaaatg agttatccag gcgttttcag gaagaaggat gcaatctgac agcgaattca 360
 ctgcatcctg gagtgatcgt cacaataaac aatcgccagg ttgctggaaa cagtgcgctg 420
 atttc 425

<210> 6966
 <211> 379
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-024-Q1-E1-G10

 <400> 6966

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 gcggcgccgg cgccggcggg tcccggccga acaagggtgt ggtgcacgtt cccagcgggg 180
 aggtggtgac gtcgtatgac gtgctggagc ggcggtctac cgagctcggc tgggagcgct 240
 acctctacga cccctgtctg ctccagttcc accagcgtc caccgtgcac ctcatcaccg 300
 taccctga cttctccgc ctcaagctgg tccacatgta cgacgtcgtc gtcaagacct 360
 gaaacgtctt cgaggtccg 379

<210> 6967
 <211> 395
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-024-Q1-E1-G11

 <400> 6967

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aagagaagaa cagagacctc tgccctctctc gtcactctct ctctctctca caccaccagt 120
 gtagtatagg gtttcggctt gcctgtgcgt gttactgtcg caatggcagg aggtctcttc 180
 tccatggagc acccatgggc ctctgttttt ggcattctag gcaacatcat ctcatttctg 240
 gtgttcctcg caccagtgcc gacgttcctc cgcgtgtacc ggaagaagtc gacggagggg 300
 ttcagctcgg tgccgtacgt ggtggctctg ttcagctgca cgctgtggat cctgtacgcg 360
 ctggtgaagn acaactccag cccgctgctg accat 395

<210> 6968
 <211> 154
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-G12

<400> 6968
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 cgagtccact ccttggtgtg ttcaacagct tccacctcat tggatttcca atgctttgca 120
 atgttatcgg gtacagggtc atccggattt ggtg 154

<210> 6969
 <211> 352
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-G3

<400> 6969
 caggcgacgg cgagatgtgc tcgagctcgc ttattagcgc agagctgaag aaggtccaga 60
 ctgccaccat taatttcgac aactccctca gcccgcgcga cacgctggtc cagatcatat 120
 gcgccgacca gaaggggctc atctacgaca tactgaggac gatgaaggac tgcaacatcc 180
 agatatttta cgggcggttc agatcggaca agaaagggcg gccaggcagc aaaggctgcc 240
 gagaggttga cctgttcgtg aaacaagtgg acggcaaaaa gggttacggat cctgagaagc 300
 acgacgctct gcgggcgcgc ctgagattcg agatgctcca cccgctcagg gt 352

<210> 6970
 <211> 354
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-G5

<400> 6970

ggagtcttcg acgacgtcaa tagcatgatg cagcaacaac agcagcaggc accacccgtg 60

gtgcagcagc agcagcagca gcagttcttc atccgcgacg acacgccatt catgagccag 120

atgggcgaca tcaccagcac ggcggagttc aggttcggct ctggtttcaa catgtctagc 180

accgccgccg ctgattaccc aggcgcggcg cagaagaacg acggggccaa ttggttctac 240

tgaagaataa aacttgtagg gtcctcgtt ataagcttcg gattcctcca tggctctccc 300

aagtgtcaa gtcttatagg tcttcgttat ataggttttg cagtagctgc aaga 354

<210> 6971

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-G6

<400> 6971

agcccacgcg tccgcccacg cgtccgcca cgcgtccgca ggaaccgagt ctatgggttc 60

ctctcgtttt ctccgcccc agagcttgag gaagcgtaa agctcgacag aacggtcttc 120

ttcggacggg atatcgtagt gaaggaagcc catgtagagc gccagacgcg ctgagccgct 180

gagtgttacc cttgagaact gcactttttt tgtctgcctc gttgactgac taagctcatg 240

ctccaggcac aagctacaca gctgacgaag aagcaattga gcggttcac gcgaaagagt 300

taaaaaaaaa aacggtagt taaattagta ccattgctgc aactttgtca gcgccgccgt 360

ggatgctggt gtgagaaatt ctaggacgaa ctgagaactg gtattgtagt ggtaatacat 420

gttgtttta 429

<210> 6972

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-G7

<400> 6972

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tccttccccg cccgccacgc acccgctcga gcactcctgg accttctggt tcgacaaccc 120
gcagagcaag tccaagcagg ccgcctgggg gagctccatc cgccaatac acaccttctc 180
catcgtcgag gaattctggg ggctttacaa gaacattaat caccctagca aattgatcgt 240
gggagctgat ttccattgct tcaagaacaa gatcgagcca caatgggaag accctatttg 300
tgccaatggt ggtaaatgga acatcagctg tggaagagga aaatctgata cgttctggct 360
gcacactctg ctggctatga ttggtgaaca attccactag ggtgatgaaa tt 412

<210> 6973

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-G9

<400> 6973

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gcggcctcct cctcctccct ctctcagcg tccccctcg ctgcctaata ctctcgccgc 120
ggccttgccg gtgccgcaga cggccatggg tctgcgaagg tgccttgtg gaaagatccg 180
ttgagcccga gcaagtggaa ggaagagcac tttgttctag caagcctctc aatgtggggg 240
gttatttttt atggtgggta caagcttttt agtggaaaga aggaagccaa gactgaggcg 300
gcatcaccac aggcataagg ggccggagatg gaggatatacc cgtatctgtg gcctggcaac 360
aatgttaaat aaa 373

<210> 6974

<211> 374

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-024-Q1-E1-H10

<400> 6974

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taciaaagcgt gcaccaagga gacagtcgca agatgggtct ggtgataaac tagtgggtgat 120
cgtggaagca agctcccggg ggggtggggg ccgtcgtgga ccacatgccc ctattcctgg 180

cgccctaaac tcacccattg atgtggaggc catcgaagat gaagttcagg cagtatctcc 240
 ttgcgcgagtg cccctgccat gtattctgca naggaggaac aggagaacca ggaggggaacc 300
 tataacagtg gttgacttgg aggttgaagc tagccgggaa gggagcaaaa cccagagggt 360
 tgaaccatta ggac 374

<210> 6975
 <211> 370
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-024-Q1-E1-F5
 <400> 6975

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 aattcaagca gtgctgtcac tctatgccag tggacgtact actggtattg ttctcgactc 120
 tggatgatgg gtgagtcaca ctgtgcccat ttatgaagga tatgcccttc cccatgccat 180
 tcttcgtctg gatcttgctg gtcgggacct cacagactcc ctcatgaaaa ttctcactga 240
 gaggggttat tccttcacaa cctctgccga gcgagaaatt gtgagggaca tcaaggagaa 300
 gcttgcatat atagctcttg actatgagca agagttggag actgccaaga acagctcctc 360
 agttgagaag 370

<210> 6976
 <211> 433
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-024-Q1-E1-D7
 <400> 6976

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 accaggagca gttcctcgg gaagaagctc aacaagccgc aggtgtccgc ggccgtgacc 120
 tagcatggca agagctccag cagcaacagc aggttcaagg cgatggctgc caaggagggtg 180
 gacgagacga agcagaccga cgaggacagg tggaatggcc tggcctacga catctcggac 240
 gaccagcagg acatcaccag gggcaagggc ctgctcgaca acctcttcca ggcgcctatg 300
 ggggacggca cccacgtcgc cgtgctcagc tctacgact acatcagcca ctgccaaaag 360

ttctacagac tccaccaaca ttatggatgg gcttcaacat agccaagggc ttcattggaca 420
agctcgtcgt cca 433

<210> 6977
<211> 369
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-024-Q1-E1-D8

<400> 6977

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gcgtccgtca ccgcccgcgc cccggtcgcg gcccttcgcc cgtcgtcggc cttccttggc 120
cactctagcc gctcggccg caccgcgtcg cccacgaggc gcagcctcaa ggcggaggcc 180
aagggcgagt ggctccccgg ccttcctctn ccttcctacc tcgacggcag cctggcgggt 240
gacaatggct tcgaccggtt gggcctggcg gaggaccccg agaacctgog gtggttcgtg 300
cagggcgagc tggatgaacgg ccggtggggc atgcttggcg tggccgggat gctcatcccg 360
gaggtgctg 369

<210> 6978
<211> 402
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-D9

<400> 6978

aaaaacactc aagggatctt tgttttagagg atggagacct aaatctgacc gaccttcatt 60
ggtggataaa tatgcagaaa aagaggagac cttcacctaa aaaacaaaga tatatgttga 120
aatggttctt tttaaaagat tgcaacgtga tccgggtgtc agagattcag aaggtcttgg 180
acatcgccga cgagcgtagc ctcattgaca ccatcttctt ctgctacctc ggggtgcaatg 240
caagctaagg tggtcgacaa tgggtgttcgc ggcggcgaac tcgcagcgca gccaggtgat 300
gaagccatcg cgctcgtcga cgagccaggc gacgggctcg gccacggcgg tgccgggggc 360
cggcgaggcg atgacggcgg ccggtggaggc catcgccgtg cg 402

<210> 6979
 <211> 391
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-024-Q1-E1-E10

 <400> 6979

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 attaccaagg gttatattgt tgatgcttaa aacaaatgac tgtttacgtg cagtcagtca 180
 tgccctgggt gggggcagtt ccttggagtc gtttatgatt attggacggg tatcttctga 240
 agctgtgctg gatgctaaaa ggatgaacag gaggtccttt ctcgatggat tgaagatatg 300
 gctggaggaa gccctgctgg aagctcgatt ctttactttg aagctgatgc taagtgttat 360
 gcaacttaag aagttgttgc ctggctaaaa g 391

<210> 6980
 <211> 425
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-024-Q1-E1-E2

 <400> 6980

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 gcccgccgcg gctccgaagc cgaagcctgc cgccgccaag ccgaaggcgg ccaccgctgg 180
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 gaccggctcc agctcgcaag cgatcgccaa gtatgtgggg ggacaagcac ggcgcgtctc 300
 tgccggccaa cttcaaagaa gatgctttcc atccagctcc gtgggtccgc agccaagggc 360
 aagctcgtga aggtcaaggc ttcgtacagg ctctcggacg ccgccaagaa ggatccccc 420
 agacc 425

<210> 6981
 <211> 146
 <212> DNA

<213> Zea mays
 <223> Clone ID: LIB189-024-Q1-E1-E4
 <400> 6981
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 ccgccccacc ggccgctgtc taccgatttc gccgacgaca acaagcccgc cggattggcc 120
 aagctgaccc ccgcgagcga gtatcc 146

<210> 6982
 <211> 248
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-024-Q1-E1-E6
 <400> 6982
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 aaagcagaga tgacctgttt gcaaagttcg aagatctcaa acagaggatt atttgatcta 120
 tcgtcgacct tttgccacgt gtttaggctt tacagccagc ttattattag gtttttttcc 180
 ccctttcggt tgaatattac tggatggggt aagaagggtca tgtatctaaa ttgtctctc 240
 agggcttg 248

<210> 6983
 <211> 353
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-024-Q1-E1-E7
 <400> 6983
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 tgcacatcct tactgatgga cgtgatgttt tggatggaag cagtattggt ttcgtggaga 120
 ccctagagaa tgatcttttg gagcttagag cgaagggtgt tgatgcacaa attgcatctg 180
 gtggtggaag gatgtatgtt acgatggacc gttatgagaa tgactgggat gtggttaaac 240
 gtggttgga tgcccaagtg cttggagaag caccctacaa attcaaaagt gcacttgagg 300
 ctgtgaaaac actgagagca cagcccaaag ccaatgatca gtacttgccc cca 353

<210> 6984
<211> 392
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-E9

<400> 6984

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accccgcgca ccagggtcccc gtccgcgact tctctctctc cctctccgac acgtccctgc 180
cgcgccccctc cgtcgccgac tgggtgggcca ccgccgcgct ctacgccgac cagaccctcg 240
ccaacgtcac ctgccgcgtc gacctggccg gggaagccgc cgacgagtcg gcctcgctgg 300
gccgctcgct ctcccggctc gacatccagc gcgtgctcgc ctctgcggtc gccgcggggc 360
ggctccctgc cgacacccgc ggcggggcct ac 392

<210> 6985
<211> 234
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-F12

<400> 6985

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cgcacccgcg cttggttgac attcatcaca ttgaaattca tggcagtggg cagaaattaa 120
attgcatcag aatcccagag gactgtcgca ttgctttgta ttgattaaac agtcggtttc 180
ccattgtctg taacagttct gactcggttg ttcgtccccg gggaaggccc ccga 234

<210> 6986
<211> 213
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-F2

<400> 6986

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ctgctggtat agagccggag gatgtggcaa agcgcttgat ggactacggg ttccacgcac 120
cgaccatgtc atggcctggt cctggcacac ttatgattga accacctgaa agtgagagca 180
aggccgagct ggacaggttc tgcgacgctc tta 213

<210> 6987
<211> 383
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-024-Q1-E1-F3
<400> 6987

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ttgtagagca cataagtcaa ctgtcatatg cagcagtcac gttcaataag ctgttagctg 180
tagcaggttg gttcctggac cagctagtat ttgcgaaacc aatgcccttt gcactctgcc 240
agaaaaacgg tgaaattcta tatccatatt ctaattttac tgaaaacctg gtgtgccatc 300
attgctcata accttggttg tcagttgtca cagtattggg tcacagaaaa tgtttgcaat 360
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<210> 6988
<211> 437
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-024-Q1-E1-F4
<400> 6988

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tatcattaaa taaagggtag agcaattctt ttttctagag attctagaga aagtgagaca 180
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cacactagaa ataaaggcta aagtatgctc tccttgccct tggtttgagc aaaacagatt 360
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actaattcag ttccgcc

437

<210> 6989

<211> 335

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-D6

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tcaaaggctc agatcactgc aattcacctg ataattggga cccttcagcg gatgaatata 120
tttgggggtgg aaaatagaga caccctcact cacaagacaa cagggtactc agcaaaactt 180
ctcaagaagc ctgatcaatg ccgagcagtc tatgctgttt cacatctttt ttggactgat 240
gagcaagatg gtataatgga tgggtgaaagg gttctccttt gtttgaagcg tgccttgaga 300
atcgcacatg ctgctcaaca gatggctagc gctac 335

<210> 6990

<211> 365

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-C10

<400> 6990

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gtaccctgac ctggaggaga cgagcaccgc cgcgaggcc accgtcgtec tcggcgtggc 180
cccggagaag aaggccgcgc ccgagttcgt cgaggccgcg gcggagtccg gcgaggccgc 240
ccacggctgc agctgcggtg gcaactgcaa gtgcgacccc tgcaactgct gatcacatcg 300
atcgacgacc atggatatga ttattatcta tctagcttgt ggtgggtggtt gaacaataat 360
aagcg 365

<210> 6991

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-C11

<400> 6991

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gttggttcaa catcaatttc aaaaggaaga cagagcatag gtttcttgaa ggaagatacc 180
gagtcaggct catacttcgc aatgaaatcc ttagtgatgg aagagctcaa ggcatttttc 240
cgtccagagt tgctcaatag aatcgacgag atggttgtgt tccgtcctct ggagaagact 300
cagatgctgg ccattcttga tatcatccta aaggaagtca agggccgact tttggccctc 360
gggatagggt tggaggtgtc tgatgcaatg aaggacctga tatgccaa 408

<210> 6992

<211> 129

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-C2

<400> 6992

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cagttcctc 129

<210> 6993

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-C3

<400> 6993

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acaacagatg aaattgatag agtcgtccat gaagagacaa ttgctagagg tggataccca 180
tctccattga attactatct cttccccaag tcatgttgca cgtctgtcaa cgaagtcatt 240
tgccatggaa ttccagatgc caggaaactt gaggatgggtg acattgtaaa tgttgatgta 300

actgtatact ataaaggtgt tcatggtgat ttgaatgaga catattttgt tggaaatgtt 360
gatgaagctt ccaaacacct tgtacgttgg tcctatgagt gcttggagaa agctattgcg 420
atagttaaac ctg 433

<210> 6994
<211> 209
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-024-Q1-E1-C4
<400> 6994

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agagtcgtcc atgaagagac aattgctaga ggtggatacc catcgccatt gaattaccac 180
ttcttcccca ggtcacgttg cacgtctgt 209

<210> 6995
<211> 384
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-024-Q1-E1-C5
<400> 6995

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gaacaaatgt gagattttgc agaaatatat gagatgcaag agtggctgct ttcccagcct 180
tggaaccagat caacctgctg aagtgttga cgaagctcca accagcttga atccaggagc 240
atgcttatac atgcagatgg atgagcggct cacatgtgat ggtttcgcac atcatacccg 300
ggcggctctg tccatgcgcc tgagaagggg aaatgaatgt gacactcata agacagcaga 360
ggggtagttt tctctgaaaa actt 384

<210> 6996
<211> 296
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-C7

<400> 6996

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gaggaggcgg agatggcgaa gccgggtctcc tggctcgggc tcggcggcac ggacgccgag 120
cgcctcaaca tcgcgctgtg atttgatct cggttgctac ccacccggat cgaccggtgg 180
cgatttgatt ggctgggttc ctggcttcat ttgggtcttg ctggattggg gttggtatgg 240
acatcggaga ttgaggattg tatagatgta ctctgggttt ttttctctct ccctta 296

<210> 6997

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-C9

<400> 6997

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cattgatctt tgaagggccc aagctaatgc agcatggatt tagtgatgcc attgcaaaag 120
taggtttgac aaagtttgtc agtgacctat tcttggttgg actgttctac catctgtata 180
accagattgc taaaaacacc ttggagcgag tggctcctct gacacatgct gtcggcaatg 240
tggtgaaacg tgtttttgtc attggtttct caatcatcgt ttttggcaac aaaattagca 300
cacaaactgg aattggcacg tccattgccca tagctggtgt tgctatgtac tcttacatta 360
aggctaagat tgaagaggag aaaaggaaaa agagcgcgatg actgct 406

<210> 6998

<211> 374

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-D12

<400> 6998

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gggggataag gatgctgtgg tcattgttga tcatgggtca agacgccaag aatccaatct 180

catgctaaat gactttgttg agatgttccg ggcgaagact agctatagta ttgttgaggc 240
 tgctcatatg gagctagcgg agcctactat aaaggatgct tttgggaaaa gttttgcaac 300
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 aagacattcc tgct 374

<210> 6999
 <211> 414
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-024-Q1-E1-D3
 <400> 6999

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 aggaggtgat cccgctgctg acgccttaca agatggggca gttcgagctc tctcaccggg 180
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 ccgtgtacta ctgcagcgc gccaccaggg gtggcctgct catcgaggag gccacggggg 300
 tgtcgccac cgcgcaaggg ttcccggagt cccctggcaa tcgggacgca cgagcaggtc 360
 gaggcgtgga agcccatcgt cgacgcggtc accggcaagg gggccatctt cgtc 414

<210> 7000
 <211> 434
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-024-Q1-E1-D4
 <400> 7000

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 agatcgagga gaggatggag gtgttcattc acgaggacta cgtgaacaag cgcaacgagc 180
 tgaggaggga gcagaggcgc cggaactgc agaggctgca ggtggagagc aaccccgacg 240
 cgtccaggga ggcgctggca agccgggaga gcccgaggac gccggcccag tgctgacgc 300
 cgaccggcgc gtcgccgtcc agcttcagat tcccgaactc gaggagcacg ctgcagtcgc 360

cgccgcgagc ggcggggcag gctgccggtt ggccgtccga gcatcgccgc ctctacgact 420
gcctcaagcc gtac 434

<210> 7001
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-D5

<400> 7001

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ctgtggccct gaggtgtct ggttcaagac cggcgcgctg ctctggacg gcaacaccct 180
caactacttc ggcaacagca tccccatcaa cctgggtggtg gccgtgatcg cggaggtcat 240
cctcgtcggc ggcgccgagt actaccggat caccaacgga ctggacctag aggacaagct 300
gcaccccggt gggcccttcg accccctggg cctggccagc gaccccgacc aggccgccat 360
cctcaagggtg aaaggagatt cataacgggc cggctggcca tgttccccat gttcgcttc 420
ttcatccagg cct 433

<210> 7002
<211> 410
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-B9

<400> 7002

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ggtcacagca ctgctcatct gggtcacaac tgcaggattc cattcttatt ttccttgctg 180
tgccgggtat gccacccatg cccatgagcg tgctgggatc tgagtccatt gcatctgtca 240
agctgcgcat ccagcagttc aaggggcttt gtggcgacga agcaaaggct tgtgctggat 300
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gttctgcata ttgttattcg actgtcagat ctccgtgtga ttaacattga 410

<210> 7003
 <211> 385
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-024-Q1-E1-A2

 <400> 7003

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 accgccgccc tgtcgtcat cgtgctggac ttcaaggaca ctgcccctg cctggagaat 180
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 aagaccggga tccccagcgc gttctgggac ttcattggagc cgtacgcgcg ggttcaaacg 300
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 gtgccgacgg tctgtctct gggcg 385

<210> 7004
 <211> 365
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-024-Q1-E1-A3

 <400> 7004

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 aaaatgccac tttttggatt cagcctattc aaaaaagtcg tcccgggagt ctcgcccaa 120
 tcggacgacg acgacgaact gatcgaccct caggtaacta taagggaatc gtgcgccct 180
 cactgtgcct ctctcaaagc gaaactcgac gaatgcaacg cccgggtgaa ctcgaggtcc 240
 gcgaccaccg aaacttgac cgaggagctt ttcgatttcg ttcattgcat cgaccattgc 300
 gtctccaaat cgcttttctc taaactcaaa tgaaagaagg acgacggaac caccctttta 360
 gcgtc 365

<210> 7005
 <211> 316
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-A5

<400> 7005

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gctctcttgt ggccttgtgg gcgcgacgca gtatcaggtc gcaattgaag attgaagttg 120
tggaacttgtg ggcaagtttc tctcgctgaa tattggtctt gtctaaacaa aaagccttac 180
aaaaagcgga aaaagaagat gttgaagaac agataatccg gagaagtatg tgaaaattta 240
tgggctactt agcacagatt agaccgcttt gtgaaaggag ctgccagttt taaccaaaaa 300
gggggggcgg ttcaaa 316

<210> 7006

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-A6

<400> 7006

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gttctccgcc tcagaggtgg tatgcagatc tttgtaaaga ccctgactgg aaaaaccata 180
accctggagg ttgagagctc ggacaccatc gacaatgtga aggcaagat ccaggacaag 240
gagggcatcc ccccggaaca gcagcgtctg atcttcgccg gcaaacagct ggaggatggc 300
cgcaccctag cagactacaa catccaaaag gagagcacc tccaccttgt gctccgtctc 360
cgtggtggtc agtaagtcac gggtcgttta ggctgccgat gtgcctgcgt cgtctgggtc 420
cctctc 426

<210> 7007

<211> 356

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-A7

<400> 7007

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cccgatggca ggacctgatg aacccctaga acaggcagat caaaattacg gcgatagctt 180
gaggagtttg cctccatctg ttgccgctgg gttagctgct gaaagaaggc gactaatgga 240
gcaataagtt aatggagttt gcctccatct gttgccgctg ggtagctgc tgaaagaagg 300
cgactaatca agggacctcc atccatcggt gtggcagttg tgctaatttt acttga 356

<210> 7008

<211> 247

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-A8

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gaaggatgtg gagtcgctat tcccgatggc aggacctgat gaaccctat aacaggcaga 180
ttaaagttac cgcgatagct tgaggacttt ggccccatct gttgccgctg cgttacctgc 240
tgaaaca 247

<210> 7009

<211> 263

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-A9

<400> 7009

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cggacaattt cactttgccc caggcaaagt tttttatgaa tccaacatag atgtgcctga 180
gctgtcatta cctgaacgtg gttccaatat taccacacg ataaacaaac tgtcctttgg 240
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<210> 7010

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-B1

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aattcaacgc attcagctaa aaatttacct tcagctggac ctgacgaacg gttatatccc 120

cattttgttg aacataacaa aaattcattt tctgcatcag ccaagaaaga taaggggaaa 180

ggcaaattgc ccgttggaga ttctggatgc agcatgaggt caccgttggt agattgtaac 240

ctgtgtggag ctacagtcag gatgcgggac tttagacctg tattatgtcc ttctcgtttc 300

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<210> 7011

<211> 322

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-B10

<400> 7011

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ccggtctgcg tcattggcag ctggtcacag cactgctcag ctgggtcaca gctgcaggat 180

tccattctta ttttcattgc tgtgccgggt atgccattca tgcccatgac cgtgctggca 240

tctgagtcca ttgcatctgt cacgtgcgc atccagcact tcattggctt tgtggcgacg 300

aatcacaggc ttgtgctggg tt 322

<210> 7012

<211> 341

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-B11

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ttctgccgag tacgaaacca tagtgcaaaa tgctccgccca ccgccgtcgt gtgagataac 120
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 tcagatgaag ctatacttca acattttctc atcattctgt aaaattctga aaaagagtca 240
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<210> 7013
 <211> 293
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-024-Q1-E1-B12
 <400> 7013

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 cagtcaagct ttcgaatcgc ttgcagactc cctgattatg tacgacacca ttctgctcaa 180
 ttgatagctc ttagtaccgc gaggtcacga catcactctc gacgtccttg ttatccggct 240
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<210> 7014
 <211> 386
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-024-Q1-E1-B2
 <400> 7014

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<210> 7015
 <211> 417
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-B4

<400> 7015

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aagggtggca agaaaaagac cgctcgaccct ttctctaaga aggattggta tgacatcaag  180
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caaggcgacg aggattaagc ttacaggaaa atcacgctcc gtgctgaaga tgtgcagggc  360
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<210> 7016
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-B5

<400> 7016

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gtgatcgagc tagctgagct ccgatcctcg ctagctagct aggataccgc cataccacaa  180
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gaagaccgcg aaaacgatcg cgtccccggg ggcggggcat cctgccgatg gacgagtoga  420
acgcgac                                           427
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<210> 7017
 <211> 138
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-B6

<400> 7017

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agtaactcct gtatttggtg tatgaaccga aagattgcga gggtcactgg catggtacag 120

cggagtgag agtgagtg 138

<210> 7018

<211> 226

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-B7

<400> 7018

cggacgcgtg gggaaatgct tggaaacaag catatatgca ggacctggtg aacaatctca 60

tcaggtaagc ttgtattctg catagactga aatactgaca tatttttcca ttctgtact 120

tataatgctc atttatgtcc tatttagttc gatcccttga ttcactcact ggttagtctt 180

tgaatttact gcctaggcat ggaatacctg gttttgtaag tttggt 226

<210> 7019

<211> 314

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-A12

<400> 7019

acccacgcgt caggagtcag tcctataaca ccacccggaa cctgtgccag gccggcacgg 60

tgaaacggat aaggaggtg aacttcaagg tgaccgtca gccgccgtg tccagggagt 120

tcgccagaga agaacaacgc gcaccggaat gagacaacct gaaaccgcca gccactaccc 180

accgggctg gaagacacgc gcatgctcac gatgacgggc atccccgtg gcacgcacaa 240

cactggccag gccgttctc ttcactcacc ttcagaatgc agcgcaataa tcagcttccg 300

gacggtggcg tttt 314

<210> 7020

<211> 301
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-G12

 <400> 7020

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 cgcccatggc catggccatg catggctccg ccgccacgcg ccatctgttg gtcgctgcct 120
 gggcgccggg ggatattcga cggtagcatg gcactcatgt cgcactaccg ttttcgtaat 180
 cacgtgcggg tgacgtgcaa cttgcctaaa ccgatgaggt ggtttaagtc tcggtggggt 240
 cataggatgc ttacctgttg ctatacaatc tgtctctatt cttcctacga cattgacgag 300
 g 301

<210> 7021
 <211> 397
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-G2

 <400> 7021

 cccacgcgtc cgctgctacc agcaccacag cctagcaccc caccgcgtct agggttttct 60
 gctccaatgg ccgccgcgag ggcatacggg gagcgcagga tctgggtggc catcgactac 120
 tcggagagcg ccaagaaggc gctggactgg gccatcgaca acctgctcca ccacggggac 180
 accctcgtcg tcgtccacgt cctgcaccac ggcgcggagg agaccaagca cacgctctgg 240
 gccaaagtcc gatccccgct gatcccactc tccgagttcc gggagcccga ggtgatgcag 300
 ggctacggcg tgcgccccga cgccgaggtg ctcgacgcga tcgacacggc agcgcgccag 360
 aagcagctga acgtggtggc gaagctgtac tggggcg 397

<210> 7022
 <211> 315
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-G4

 <400> 7022

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 atatttaa at gttgtgggtg gattaagggg ttatttagtg ttttaagtac aaacagagga 120
 ggacaattca tgcacatact ttagcttttt attgcaatga tagataattt atatgaagtt 180
 taggacttat tttggatata atatgtcaga atgacagaga ttcacctgat atgcgagcat 240
 gagttctcgc taaaatgtag cattgagtat tgactgcagt tcagtaagta aattaaagca 300
 tgatagtatt gttga 315

<210> 7023
 <211> 380
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-023-Q1-E1-G6

<400> 7023
 agaagagaag gttgtgaaga ataaagcaag ctcaaagca gatgaatctg agctcagatt 60
 agcacagctt caacatcagc tccaaccaa tgaacctggt gactgatga atctttaga 120
 agaatcaact gccgatgatg cagatgatga tgatactaaa gattgtaaag gtttatttaa 180
 gaacttaaag ttctacttga gtcgagaggt gcctaggag tccctgttat ttataattcc 240
 agcgtttgga gggactgttt catgggaagg agaaggagct ccatttaaag aaatagacga 300
 agatatcact caccagattg ttgataggcc gacacaaagc catgttttcc tctccaggga 360
 ttatgttcaa ccacagtggg 380

<210> 7024
 <211> 408
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-023-Q1-E1-H10

<400> 7024
 ccacgcgtac gctgaagaag caggagctgc agtagctgcg gaatcttcta ctggtacatg 60
 gacaactgtt tggactgatg gacttaccag tcttgatcgt tacaaggagc gatgctatca 120
 catcgagccc gttcctgggg acccagatca atatatctgt tatgtagctt atccattaga 180
 cctatttgaa gagggttctg ttactaacat gtttacttcc attgtgggta acgtatttgg 240

tttcaaagcc ttacgcgctc tacgtttgga ggatctacga attccccctg cttattcaaa 300
 aactttccaa ggtccgcctc acggtatcca agttgaaagg gaaaagttga acaagtacgg 360
 tcgtccttta atgggatggt ctattaaacc aaaattggga ttatccgc 408

<210> 7025

<211> 361

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-H11

<400> 7025

agcgaagaga atgaaatgat gctggaccag atggcggatg cagctgagac cattgcagtg 60
 actccagagg agaacgaagc tatacttcgt cttgaaggga tgggctttga ccgggcactg 120
 gtcctggaag tgttcttcgc gtgcaacaag aatgagcagc tgaccgccaa ctacctcttg 180
 gatcacatgc acgagttcga caacgatgac gggctcggag ggccaccgct atgagggcgc 240
 tctcgatccc tacatcatgc gaacgaaggc tgtagggcag tagtaagaaa acgttttggg 300
 aatcctcccg tccggtcgct cactctacaa attcgtttgg ctttgcgtgt taatacaaaa 360
 t 361

<210> 7026

<211> 349

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-H12

<400> 7026

ccacgcgtac ggaagaagtg gaagtccctg aagagaagac aacaccacct ttggagtctc 60
 aggcagggtc tcgtctctac tttagcatct gcgggcctga gactaactca tctataaaca 120
 aaggtgagga agcgacaaat ttttggtgct tttgctccaa ggtggtatca aatgaagaaa 180
 aacaagagtg aagatgcggg aggacgtggt cctccatata ggacttttgt ttaaagctat 240
 cgggaggagt ttttgctctc cttgaaatgt gtactacgca aactcgttt atagctctgg 300
 tctgtaataa gtaacttgat cttaccttct aaataaatgt aactttatg 349

<210> 7027

<211> 411
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-H3

 <400> 7027

 cccacgcgtc cgcccacgcg tccgctgatg gttactcgct gtgcgccaag gagatgacca 60
 agctctcttg tatctcggac atcatcccag agatggagat ctgtgacttc gacttcgagc 120
 cctgtggcta ctccatgaat gctgttcatt gccctgcttt gtcgaccatt catgtgaccc 180
 cagaggacgg cttcagctat gcaagctacg aggtcatggg ctttaaccgg ggctctttct 240
 cttatgggtga cctgggtaag aggggtgctga ggtgctttgg tccaactgag ttttctgttg 300
 ccgtgaccat cttcgggtgat cgggacaatg cgaagacctg ggggacgaaa ctggatgctg 360
 aggcctatgc ttgcagcaac atgggtgagc aggtgctgcc gtttggtggc t 411

<210> 7028
 <211> 303
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-H4

 <400> 7028

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 agaccccgac ttccatgatt tcgataaaga tcgaacagag aaggcatttg acagtgatca 120
 agtgtgggct acatatgaca gcgaagatgg catgcctcgc ctatatgtaa tggttcagaa 180
 agttctttcg atgaggcctt tccggatccg catgagcttt ctcaactcaa agtcaaatat 240
 cgaactggca cctataacct gggttgcctc cggtttccag aagacatgtg gcgatttcag 300
 ggt 303

<210> 7029
 <211> 408
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-023-Q1-E1-H5

 <400> 7029

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 cttctactca gctcaacctc caaagcatga tggctctgac aaaccactct gtccaggagc 120
 tcctgtatgc cactgggtgtg gtacctggaa aggtgataaa atatgtagta gctgcaagaa 180
 agcaaggtagc tggttatgaga aacatcaggc actgcattgg cgtactggtc ataaaaatga 240
 ttgcctccag ataataagtt ctgttgcttc aaattcagtt ctgccagctg taggaatagg 300
 gatttgtttg gcttccaaat gggttggttg tctaaaaata gtcagaatca catgacatct 360
 gtgctataga tatggacctc ggtgggttttc tccacattan gaaagctg 408

<210> 7030

<211> 138

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-H7

<400> 7030

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 caaaaaatcc tctctattca ataccatcca tcaacatggt tgcattcata aatctcatca 120
 actccgcagt ggcttttg 138

<210> 7031

<211> 378

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-023-Q1-E1-H9

<400> 7031

attggaaagg gaaattccta cattgcttca aaagtccac cgcagcccat agagatatgg 60
 gcatgtgagg gatctccctt ctgtaaatta gtacgagaga cacttgtcga gttggaattg 120
 ccacatctgc tacacagctg cgcacgaggc agccccaac gacaagaatt tttcaagaaa 180
 aaggggcttt tccaggcgcc gtacatcgaa gatcctaaca cgggagtcca gatgtttgaa 240
 agcgtgaaa tcatagacta cctgaaggca acatatgccc tgtaccaag ctcgtaantga 300
 tgtatcagaa atggtcattg taatgttgcg tgtagattca gttcttcccg gtaataaaag 360

gaaaagaaat agtgggcc

378

<210> 7032

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-A1

<400> 7032

agcccacgcg tccggagcca aggagttctc gaaagcaaag aataaaagag cggctatcca 60

atccttgaag aggaaaaaac tttatgagca acaaattgag cagcttggaa attttcagtt 120

gagaatccat gatcagatga tcatgttaga agcagctaaa gctacaacag agactgttga 180

tgcattgaga actggagctg cagctatgaa agcaatgcaa aaagcaacaa acattgatga 240

tgtcgacaag accatggatg aaattaacga acagactgaa aacatgaaac aaattcagga 300

tgctttgtca gtcctcttg gagcttttgc tgatttcgac gaggatgaac tggaagctga 360

acttgaagaa ctggaaggag cagagttgga atctcagctt cttgagcctg ttgcagctcc 420

tccggtgcat ccagtgcag 439

<210> 7033

<211> 376

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-G11

<400> 7033

cccacgcgtc cgcgatctga acctcttcca gctacactca tgatgacaat tcgcaccccc 60

tcgagtccaa tgaccatggt tctcggaag tgtgtccgtc tcgtcgagtc acggcgcggt 120

acggacgcgg ccaagatggt agtggtggtc acctaccgcc ttgtggaaca ctgtgcaggt 180

cacatgcacc gcaggacgac atcatcgtgc atgtcaagaa gttggtggcg gcgcaaacgg 240

ggacgcgcac cgagaagatc cgcattccaca tgtggtacaa catctacaag gaccacatca 300

cgctcaagga ctactaggtc cactacggca tgggccacga gctctactac aactgatccg 360

ccgcgcttct ctcctt 376

<210> 7034

<211> 240
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-E3

 <400> 7034

 aagaagagtg tcaagtgaac ctgaaacttg cgggtgtcact ggctggtacc ctgagtgtga 60
 gtgagtgatc gagctagctg agctccgatc ctcgctagct atgataccgc cataccacag 120
 gtctttcttca catgttttagg agtgacagca gcaagacatc gatggcctca gccaccgtgc 180
 tcaagtcttc cttccgtccc aacaagtccg aatggggacg ccacaaggca tgccgccgcg 240

<210> 7035
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-E6

 <400> 7035

 aggaccgagc aaagcgcaaa gccccccaac cgcggatcaa tccgcagcat cgatggcgcc 60
 caaggcggag aaaaagccgg cggcgaagaa gcccgcgag gagagcccg cgaccgagaa 120
 ggcgagagaag gctccggcag ggaagaagcc gatggcggag aaacgcctcc ccgcgggcaa 180
 gtccggcgcc ggcgagggca ataagggcaa gaagaaagcc aagaagagcg tggagaccta 240
 caagatctac atcttcaagg tgctcaagca ggtgcacccc gacatcggca tctcgtccaa 300
 tgccatgtcc atcatgaatt cttcatcaa cgacatcttc gagaagctcg ccgcgaggcg 360
 cgccaagctc gcccgctaca acaagaagcc catcattacc tccccgaga tcc 413

<210> 7036
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-E8

 <400> 7036

 agcttcgtca tacagaagtt tatctccttt aagagatcct gatatccttg gaagaaactt 60
 gccaggacca acatccccta ttccttcgac atcaagtgcg aggatcgcag cattgaacac 120

atccaatgtt cggaatgaaca tgcgctgcc tgtctctccc tgccttagcc cgctacggca 180
gtacaggcag tccaaccgaa gttgcttgcg ctccccctccc caccagcct attcagctgg 240
agcagccaac tacaatccta tcaacaatgc actctacca acgcgaccaa gcagcgggtct 300
cacagatcca tggctcgaaa tctctcaggt gaaaacgcaa acttttgatt ctccaagaag 360
attgtagaga ttccaaaaag aagcaatact ttgtatacag gcagggaaag a 411

<210> 7037

<211> 326

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-E9

<400> 7037

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gcaattacca acatcacoga gtccatcgac atcaagtcgc aggatcgcag cattgagcac 120
atccaaagtt cggaatgaaca tgcgctggc tgtctctccc tgcgctagcc cgctacggca 180
gtacaggcag tccaagctaa gttgcttgcg ctccccctccc gacggagcct attcagctgg 240
agcagccaac tacaatccta tcagcagtcgc actctacca tagcgaccaa gcagcgggtct 300
cacagatcca tggctcgaat tctctc 326

<210> 7038

<211> 238

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-F2

<400> 7038

cggacgcgtg ggcgaacgca tgggcgggat cgtgctcagt cactagtctg tcaatctcgt 60
ctcacgggta gacaacgact tgggcaacag caaccgcatt gtgaagggtga tctcaatat 120
gctcatgacc cactgtacgg gatTTTTtcta cctgcttgta agggatggat gcagctagt 180
ttcgctctaaa attaaagttc atagtactag ccactgagtc gccagcttca tgcagagt 238

<210> 7039

<211> 283

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-F4

<400> 7039

aaaaaaaata aaaaagaaaa aagaaaaaaa aaaaaaaaaa agaagaaaaa aaaaaggggg 60
gaaaatcaaa acggataaaa gcttaaattg gcggggattc aaatgtgata gttcttcggg 120
tgggtctcca tgagatcttt tcaactggcg tcgttttaac atgacttgat tgggatgccc 180
ttggttttac taaaccttct cgggttgaat cctgtcttcc tttccctaag tggccttcca 240
gtgaaatcgg ccttttccga tcggccttct caacaattgg gcc 283

<210> 7040

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-F7

<400> 7040

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gcgacgagct cctgtcggat tcattcacct acaaggagct cgagaacggc gtctgtggg 120
aggctcgagg aaagtgggtc acccaaggct ctgttgatgt ggacattggt gccaatccat 180
ccgccgagg tggtgaggac gaaagcggtg atgacacagc tgtgaagggt gttgatattg 240
ttgacacatt ccgtctacag gagcaacctc cttttgacaa gaaatcattt gtgtcttaca 300
tcaaaaaata catcaagaat ctcaactgctg tgttgaggcc agagaaagcg gatgagttca 360
aaaa 364

<210> 7041

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-F8

<400> 7041

gctgtttgat tattactgag attcaatcat ttggtcagat gagagtctg gctggggact 60
tacaagtgtg gcactgttgt cggcttgtga ctaaataagca tcacttcaca tacaacactg 120

gataatggat cgtagggata cttcaggggtt tgtagtgga ggatgcaaaa ataatgaagc 180
ctactagttt ctctatatct tctaacttgg tagctttatt gacaattatt taaccagaa 240
gtgaggccag ctggtacttc ccataaagtt tggttactct aatagcaatg gaaccaggc 300
atgggcgttc agcattcact ataagtttct caaatccaaa tggctttgct aatcagtgc 360
ccgccattcc agccgtcagt t 381

<210> 7042

<211> 383

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-G1

<400> 7042

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cgtctcacac ggaccaggat cacgttcagc tacgccttat gcttcaacgg cggctcacac 120
atcttcagcg acggcaggtt ggacgacctc gggaacacga gcatcatcga cgcggagagc 180
atccttgcca tcttggcctg ccagatcatg gtcattggcg acttcgacgg cgaccgcac 240
gcctgcggcc agctcggcga ggtcgtcaac tcgctctaac ccggcagcag catccatgcg 300
ctcggcctct ccaacgatcc caaagcatc gccaaactca aagtcacga gctcagtaac 360
ggtcgcctcg ccatgttctc caa 383

<210> 7043

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-G10

<400> 7043

cccacgcgtc cgcccaaggc aaccaaacca tctcgactcg tggggaagat tcgctctcgc 60
cggcgctcgc ggcttaggtt tcgaggaacg tccgtccgctc cgtccggtga aggagcggta 120
gggaggcgga gatgatcag gtggtgctca acgaccgctt ggggaagaag gtgcgggtca 180
agtgaacga ggacgacacc atcggcgacc tcaagaagct ggtggcggcg cagacgggga 240
cgcgccccga gaagatccgc atccagaagt ggtacaacat ctacaaggac cacatcacc 300

tcaaggacta cgaggccac gacggcatgg gcctcgagct ctactacaac tgagccgccg 360
 cccctctctc cctctcgtca ggtactagca gtagcagcga ctggttccct ctacaactcg 420
 atttcctttc gattc 435

<210> 7044

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-C8

<400> 7044

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 tatgaggtcc tcagcgaccc tgaaaagaga gagatctatg accagtatgg cgaggatgcc 120
 ctcaaggagg gaatgggagg cgggtggtggg atgcatgata cctttgacat attccagtca 180
 ttctttggtg gtggaagccc ttttgagggt ggcagcagta ggggcagaag gcaacgacgg 240
 ggagatgatg tggttcatcc tctgaagggt tctctggagg attgtacaa tggcacatca 300
 aagaagctct ctctgtcccg caatgtcttc tgctccaagt gcaatggtaa gggttccaag 360
 tctggagctt cgtcgagggtg tgctggttgt caag 394

<210> 7045

<211> 287

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-D1

<400> 7045

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 ctaaccactc cgatcgaatc atccgagggc cgcagcagcc cggcgaggct atgtctcagg 120
 caaccgccgc ctcccgggat cgcttcgcct ggtgagacaa ctcgggccgt tcatttcgtc 180
 tttccgtggg gatatgaggg ccgctccgac cgattcgccc acggcgccgg cgaagtccat 240
 gctgaggctg ctgttcgata cccagctcct gcggtattccc ccagcgg 287

<210> 7046

<211> 369

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-D10

<400> 7046

agcggacgcg tgggatctgg cgcttccttg gaccatggct acaccgacca cggaacaagt 60
gcacaaaagt catcttttgg ttagttggca tgcaacgtaa agtttaatct acctatatca 120
caagattttg atcaagagtt gacaagctta atggaccatg actatttttc accaaaaggg 180
caaagtttag tttcattatc aattatatta accactctgt tcaaatttaa gatcgaattg 240
ggttcttcct ttatttagca tacttgaagt tcattgcttg tttcattcgt accaactaat 300
acatttgttc acgattttat tccaggctaa aagaactcgt gaaaggaccc ctactcctgg 360
aaaatactg 369

<210> 7047

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-D11

<400> 7047

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gagacatctc cccacgttat aaatgctgtc atggaggcaa ttgaggggat gagggtcgca 120
ctaggtgcgg ctgtgatttt aaattattgc ctgcaaggtc tcttccatcc agcaaggaaa 180
gtacgagaag tgtattggaa gatatacaac tctttgtaca tcggcgcgca ggatgcactt 240
gttgcttctt atcctgccct ggaagacgat ggggataaca tctttagtcg tccagagttg 300
gcaatgtttg tctgattaac gctggatgtg catgtccatg tgtcttcac ccatattctta 360
tgaagcttga actgggtggg actctgagtt agagctttgt atttacttgg gacacc 416

<210> 7048

<211> 385

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-D12

<400> 7048

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 agagaattct ggttccggct gatgtgcatt ttcagactac aaaatctggc tcctacacct 120
 agtacggtgt cttttacggg gtggtgggag atgattgaca atggctctgg agatatgatt 180
 atgaaggggtg tcaactccct tattgccttg ggagcctgga ttatttgga taccggaat 240
 cgaattgtct ttgatggact cttccctagt gtttctgcag ctctttgtca ggcaagggag 300
 gaacaacaat tgtgggaaat ggcaggagct aaaggtctct cttttcttgc cgcaaccatc 360
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<210> 7049

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-D2

<400> 7049

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 gctgctgggc cgccccgtgc agtcggccgt ctctaggtcg tcggcgagga aggcgcctt 180
 cgtcgtcagg gccagctcca gccctccagc caagcaaggt gccgacaggc agctgtggtt 240
 cgcgccaag cagtcctctt cctacctga tggcacgctg cccggcgact atggcttcga 300
 cccgctgggc ctctcggacc cggagggcac cgggggcttc atcgagccca agtggctggc 360
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<210> 7050

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-D3

<400> 7050

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 taccgccata ccacaagtct tcttcacaag tttatgagtg atagcaacat catatcgatg 180

gcctctgcc a ttgtgtcaa gtctctgttc catccaccca actccgcatg gggcgccaag 240
acacatgtcg ttgcgtcaa gccactcact ctcttaattc gattgcacgc ttccccgtaa 300
ctatggcttc gacctactgg gcctctcaga ctcggtatggc accgggggct tcatctagcc 360
caagtggatg gcctacggag atgtgatcaa cggccgccat gccatgctag g 411

<210> 7051

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-D4

<400> 7051

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cgacatcacc ctctgggtccg tcgactgcgc caccgacgcc atcgттаатg ctgctaатga 180
gcgaatgtta ggtggcggag gtgttgatgg agctatacat caagctgctg gaccagagct 240
agtgaagca tgccggaaag ttccagaggt caaaccagga gtccgttgtc ctactggaga 300
agctaggatt actctgctt ttgagcttcc tgcctctcgg gtgattcaca ctgttgggcc 360
tatatatgat ttggacaagc atcctgaggt gtcattaaag aaggcctatg 410

<210> 7052

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-D6

<400> 7052

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ccttatgttc cttgggtctt ctgcaagtgc tgctacggcg accattttcc cacaatgttc 120
acaagctcct atagcttccc ttcttcccc gtacctctca ccaacgggtg ctccgggtatg 180
tgaaaaccca attcttcaac cctacaggat ccaacaggca atcgagctg gcattctacc 240
tttatcacc ttgttctcc aacaatcatc agccctatta cagcagttac ctttggtgca 300
tttattggca caaaacatca gggcacaaca actacaacaa cttgtgctag caaaccttgc 360

tgcctactct cagcaacagc agtttcttcc attcaaccaa ctagctgcat tgaa 414

<210> 7053

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-D7

<400> 7053

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ttactaacta caagtacaga tgggtcagcg ttgcagcggg gaggtggcc accatggcat 180

tctacatgtt catgttctac atgttcaggc cagctgagag gaaccagtac ttcgcacttg 240

acgaggatga tgaggaagcc gcagagatgg cgctccgtga ggaggagttt gagctctaga 300

cgaccacgtg gatgtccaat gacatgggaa tgcagccatc tccattcat tttctcctcg 360

atgtgatgtt gatcatacta tacagattca gggtttagct aatatatgtc tacgt 415

<210> 7054

<211> 67

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-D8

<400> 7054

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gggttttg 67

<210> 7055

<211> 133

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-D9

<400> 7055

cacgcctata taatcagtcg tagtaacggc gtcacgctct gccgccgct caagtcacaa 60

cgagatcaat attaccgacc acaatagact ctgcgttcct gccgccacgg ctgtctggcc 120

cccgggtacgg caa

133

<210> 7056

<211> 348

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-E10

<400> 7056

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gacggaggat gtggtgtaca tgctcaacgg gctgggcgctc aagacgggcg tcgacctggg 120
caaggtgatg gccgccggcg agttcatctg caggcacctg ggacggcagt ctgggtccaa 180
ggcagcgacc gctctgagca aagttaccgc gaacgcctcc aaactctgac aatttaccat 240
gatcacctac tgcagataat tgcagtaaaa ttagcgcatg gtaataaata gactgaggct 300
attcaaataa atacggcctc ggagctaata atgagtaaatt ttttaatt 348

<210> 7057

<211> 262

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-E12

<400> 7057

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cgtatagcta tataggccat cgacatgaag gacgaagggt gtagcacact acgaaagaat 120
gatactctcg atcggcgcggt catacgtgga atgaacttgt ttgtatcaag ctatctatac 180
ctcaatgctt ctctacctgc cgccgccgca ccccgatatga tatgtgatac acagctggga 240
tggtatactg atattttggg tt 262

<210> 7058

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-C7

<400> 7058

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 ccatcgatcg ctagctagct gacgaccatg gcgtccctct cctctgccgc catcaccgcc 120
 ccttcttcca cggccgcgcc cgctcgcgca gtggtcagca ggaggtcctt caccgtgcgt 180
 gcctctctcc gcaaggccac tgccaccgcc gccgtggccg ttgccgccag cgtcctgctt 240
 gccggcggcg gcgccatggc ccaggagggtg ctgctgggcg caggcgacgg cgggctcgtc 300
 ttcgagccca gccagttcac cgtcaaggcc ggcgacacca tcaccttcaa gaacaacgcc 360
 ggctttcccg caaacgtcgt gttccacgaa gacgagggtg cgagc 405

<210> 7059
 <211> 333
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-023-Q1-E1-A9
 <400> 7059

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 gcgcgacgtc ccgagcagct cctgttcggt atccctgttt ctgcttggc ggctgcctga 180
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 tgctctctct catcttctg tttctgttgc ggggagttct tccgtcgcta gccggggaca 300
 ccgtcgcgc cgcccgcccg ctgtccgatg cgc 333

<210> 7060
 <211> 330
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-023-Q1-E1-B1
 <400> 7060

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 ccacctcgcc aggtcccctc caaccagcc cccgcttctt cctcccgtc tccacgcccc 180
 ctgcgtgcca tctctcccc aagccgcggc ggtgttgccg gcgcctccac atcgagcgtc 240

gggtggccgt cggcagcgac gtgtcttcgt cccatgacgt ggctgccgag gaggccgctg 300
ctgcgcccac ggtccggaag cgcgtgcgcg 330

<210> 7061
<211> 392
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-B12

<400> 7061

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tctagagatt ctagagaaag tgagacaaag tgaagcgaaa gagttttctt tgtataagaa 180
ttaggtctat atcatatcta aatagaaggg aaatcaaaaa gaagggaagt ggggattaca 240
ttggatgaat ccttaaggaa gacatatcac aaaagaaata aaggctaaag taagcgctcc 300
ttgcctttgg tttgagcaa acagattctt gtttcaccga ggaaaagaga gaagttctgg 360
ataaattgac aatgtcaact tgaattgact aa 392

<210> 7062
<211> 427
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-B3

<400> 7062

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agaaatcggg gctgtttgtg tacaagtgtt gtgcgagcct ccaagtggga ttttgagcac 120
gtgtataaag ttatagggtc cgtgttctta caaaaaaaaa aaaaaaaaaa aatcaaaaaa 180
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aataacaaat caaaaaaaaa taaaacatac 240
aaaaaaaaa aaaaacaaaa aaaaaaaaaa aaaaaccaac aaaagaaaaa aaaaaaaaaa 300
agggggggcc ccccaaaagg ttccaacttt atttacctg aaaggcagg ttaaaccctt 360
ccaaaagggc ccccaaattt caattcaggg gccgtctttt aaaaaagtcc gcctgggaaa 420
aaccg 427

<210> 7063
 <211> 418
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-B4

 <400> 7063

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 gcaatgatgg agaagtaata cgagtgactg tcccaccatt gacatctgat cgcagaaagg 180
 aattatcaaa gacagtagct aaattagctg aagatggcaa ggttgctata aggaatataa 240
 gaagagatgc aatcaaagct tatgataaac tagagaagga aaagaagctt tctgaggaca 300
 atgtgaaaga tttatcagct gatttacaaa aagtcacaga tgagtacatg aaaaagatcg 360
 aatccatcca gaagcagaag gaacaggaac tgatgaaaat ttagacctca agctgact 418

<210> 7064
 <211> 261
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-B5

 <400> 7064

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 tcagggtcac atcaggtcaa tctccctatg aagagtttat cgatttgggt acctggaaat 120
 gaactcttca tgcgcttcat gactctattg tgaagtcacg ttatcgggtga actaatttaa 180
 aaagtacacg tggattaagg accatgactg gattattccc ccgaacattt aattcgttgg 240
 ggcccccggt cataggcggg g 261

<210> 7065
 <211> 360
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-B7

 <400> 7065

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 ccaacggggc agttctcgac gagtgtggcc aggaagtggg tgatctgctc ctgaacctgg 180
 caaaagcatg ggagttagct gagacgtcaa catcaaatac cattgccaaag cagctgccgt 240
 tgatggagcc ctacttgacg cgcagcgcca aatcagcggt tggcaagcgg ctggtgtcag 300
 ctggaaggag gtttcagtca atgggacagt acaaccaggg ataactcaga ccgattgctg 360

<210> 7066
 <211> 216
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-023-Q1-E1-B8

<400> 7066
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 cgtcgctgcc catgcgccgg aatgccagct cgggcgactt catgtccgcc gtctccttca 180
 agacccacgc ggtcggcacg atctgcgggt cgccgc 216

<210> 7067
 <211> 391
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-023-Q1-E1-B9

<400> 7067
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 tcgatggcta tctttgctca tgggaaagtg aatggattat tgacaaagga ggatctaaaa 180
 cgtgcaacac aacatgtttg tgggtgtcaac ttaactgata gagtggtaga catcattttc 240
 catgtgttcg acacaaatca ggatgggaac ctgagctcgg aagagttctt aagagcatta 300
 tacagaagag aaactgacat tcgtcaacca ccacctacca ggtccatggc ggtttatctg 360
 tcttgctggt tcacgtgcta cgacgtgttc a 391

<210> 7068
 <211> 260
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-C1

 <400> 7068

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 gtactctcgg ggacaaggcg cgtatctagc gcacacgtcc gttgcctctc ggtgggctgc 180
 attgagccat ttcgccggca acgatgcacg cttcacgctc aagtaaagtc tcgttcatga 240
 atgtcgctgc tgctgccgct 260

<210> 7069
 <211> 357
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-C11

 <400> 7069

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 gttcagctag aacatccggg agtacaaccg cagtgtccgc gagattgtgg agctcagcgg 180
 gacagccgac tagtgcacga ggatgccccat cgtgcccgcg agggcacaat atggaaccat 240
 gaacgaacat ccttgtgtct gtggttcgcc agacctgtcg aaccattgag taagtccact 300
 tctagtctgt cgtcgtcacg cgctcgggtc gatccgagag atcggttgcc caagggtg 357

<210> 7070
 <211> 446
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-C12

 <400> 7070

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
 aaaaaaaaaa aaaaaaaaaa aaaaaaaagg gggggccccc caaaagggttc aaaccttatt 180
 tacccttgaa tgcaacttca aacctcttca aaattttccc caaatttcat ttcattgggcc 240
 ttcttttaaa aacttcttaa ttggaaaacc cctgggttta cccaatttaa cccctttgaa 300
 aaaaaccccc ttttcccaat ctggcttaat accaaaaagg cccccacctt tcccccttcc 360
 aaaaatttcc ccaccctaaa tggcaaattg aacccccctt ttaccggccc attaaccccc 420
 ggggtttttg tggttaaccc caactt 446

<210> 7071
 <211> 319
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-023-Q1-E1-C6
 <400> 7071

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 gcggcaagtgc cggcaagaag taccctgacc tggaggagac gagcacggcc gcgcaggcca 180
 ccgtcggcgc cggcgtggcc ccggagaaca aggcgcgcgc cgagttcctc aacgatgcgg 240
 ccggcgtcgc gccaaagccgc caacggccgc acctgcagtgc gcacctgcaa gctgcgaacc 300
 ctgcaactgc tgatcacag 319

<210> 7072
 <211> 216
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-022-Q1-E1-H12
 <400> 7072

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 accgcggggc accccaacag gccgatctgg ttccccggga gaacccctcc gccgtggctt 180
 cgacgggagc cttccccggg acttcggctt tgatcc 216

<210> 7073
 <211> 369
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-H2

<400> 7073

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 attattgggt tggtttgatt gttttagatt ccatcttggc catcgtatga ccatgctttc 300
 caaaaactat gtctatacat ttcccttgaa tgtaactatc ttttttgtgc taaataatgc 360
 tgaactttg 369

<210> 7074
 <211> 361
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-H4

<400> 7074

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 cgctagctag gataccgcca taccacaagt cttcttcaca agtttaggag tgacagcaac 180
 aagagatcga tggcctctgc caccgtgctc aagtcctcct tccttcccaa gaagtccgaa 240
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<210> 7075
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-H9

<400> 7075

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gcggctacaa gtctctgtcg atgcagccca cgccggtcta caacagcccc aacgagtcgc 360
cgtcgacccc ctctacggc cgccactccc gtcctctctc cgtcagccgc ttctccggca 420
aactccgcaa gggc 434

<210> 7076

<211> 376

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-A1

<400> 7076

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acttccaacc tggagaaatt gtaaaatctt cgaggatggc aactctcata tactaaatgt 300
acattttgga ttacatctgg gaattctgaa aatggttact gcatactcag atggccaagt 360
caaggtctac gagctc 376

<210> 7077

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-A10

<400> 7077

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ccgcgcccga gttcgtcgag gccgcggcgg agtccggcga ggccgcccac ggctgcagct 180
gcggtggcaa ctgcaagtgc gaccctgca actgctgac acatcgatcg acgacctgg 240
atatgattat tatctatcta gcttgtggtg gtggttgaac aataataagc gaggccgagc 300
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gttt 364

<210> 7078
<211> 425
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-023-Q1-E1-A11
<400> 7078

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tagtctcaag caagccatca aggaaaatta caatgcaaag agcaaatttg atccagagct 180
caccacaaaa caagtccaaa gggtactttt gctgtttaag cctgttagtg cacctcaatc 240
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ttttgaagaa aggcggccta ttgaagcaac gcgtcggcca cgatttgatg aggaaaggcg 360
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tcctg 425

<210> 7079
<211> 375
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-023-Q1-E1-A2
<400> 7079

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atttcccact gaccacaaga ttccggcatg taacggttga ggaaacggcg gcggtgcctt 180
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 atgatgtcca ggttgattgg aggcagcagg gtgctgtcac tctgtcaag aaccaaggcc 300
 aatgtggctg ttgctgggcg ttctctgcag taggtgccat ggaagggttg atcatgataa 360
 cgacaggaaa cctgg 375

<210> 7080
 <211> 419
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-023-Q1-E1-A3
 <400> 7080

acgcgtcagc ccaggcgtec gcgtcgaccc gctctacccc ggcggcagct tcgaccgct 60
 cggcctcgcc gacgatcccg aggccttcgc cgagctcaag gtcaaggatc tcaagatcgg 120
 ccgcctcacc atgttctcca tgttcggatt catcgtccag gccatcgtca ccgggaaggg 180
 cccgctcgag aacctcgctg accacattgc cgaccccgtc aacaataacg cttgggccta 240
 cgccaataac ttcgtccccg gcaagtgagg gaggcgccgc cggtgacctt tatgtgtccg 300
 gatgcatgtg aacgcacgct ggttttcggt ttgtaccatg atgtaaacta ttgttcaatc 360
 gacaaggaat aattgtgttc attgtcaaaa gaaaaagtct gatcatgata acgacaaga 419

<210> 7081
 <211> 418
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-023-Q1-E1-A5
 <400> 7081

agcccacgcg tccgaatatt ttgagcattc agaaacacac ctagcgaagc gcactagcaa 60
 cgacctaaaca acaatggctt ccaagacatt atccctcctt gcgcttcttg ccctttttgt 120
 gagtgcaaca aatgcgttca ttattccaca atgctcactt gctccgagtg ccattattcc 180
 actgttcttc cctccagtta cttcaatggg cttcgaacac ccagctgtgc aagcctatag 240
 gctacaacaa gcgcttgagg cgagcgtctt agaacaacca attgcecaat tacaacaaca 300

atccttggca catctaacca tacaaccat cgcaacgcag cagcaacaag cactgagcca 360
cctagccgtg gtgaacccta tcgcctactt gcaacaacag ctgcttgcat ccaacca 418

<210> 7082
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-A6

<400> 7082

ggtaccaatc agccaatccc cgtccgaccc acgcgtcagg actaccgcat catgcgcggg 60
gacagccgga tgcacaacat gcgagacgca ctaataggga tctaaccacca gtggcatcta 120
agacattatc attccttgca cttcttgccc tttttgtgag tgcaacaaat gcgttcatta 180
ttccacattg ctcaattgct cagagtgcc aatttccact gttcctccct ccagttactt 240
caatgggctt cgaagaccca gctgtgcaag cctataggct acaacaagcg cttgcggcga 300
gcgtcttaga acaatcaatt gcccaattac aacaacaatc cttgggacat ctaaccatac 360
aaaccatcgc aacgcagcag caacaagcac tgagccacct agccgtggtg aacccta 417

<210> 7083
<211> 412
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-A7

<400> 7083

agaggacact actcctcaga actctccctt ccctcttgta ggggccaaaa gggtcagaga 60
tctaggaaga agagaactag tccccaagcc taacaagaaa gcaagctctt ctgcaactgt 120
tggcattcgc cttaatttgt atccatccca atggcaggcc tatctctgga acaccctgg 180
gcattcactt tcggcctcct aggcaacgtt atctccttca tgaccttctt ggccccgata 240
ccgacgttct accgcatcta caagagcaag tcgacggagg gcttccagtc ggttccgtac 300
gtggtggccc tggtcagcgc catgctgtgg atcttctacg cactgatcaa gtccaacgag 360
acgttcttca tcaccatcaa cgcggccggc tgcgtgatcg agaccgtcta cg 412

<210> 7084

<211> 367
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-022-Q1-E1-H11

 <400> 7084

 ggggccagc acgcgtccgg atgcaccgac gtgtcctgca ccatcgacgc gtcgctcagc 60
 atgggtcatgg gcgacgacat ggtcaaggtc gtcgcctggc acgacaacga gtgggggtac 120
 agccaacgcg tggttgatct ggcgcacctg gtggcgccca agtggcccg cgcgcggcg 180
 gccggcagcg gcgacctctt ggaggacttc tgcaaggaca accccgagac cgacgagtgc 240
 aaggtgtacg aagcatgagg ccagggttct ttccacgacg aaacgtacag cacgggcgcg 300
 agggttcttt ccatagagaa taatatacag attattcgcc caaagagacg tatgttatat 360
 atatgag 367

<210> 7085
 <211> 383
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-022-Q1-E1-F3

 <400> 7085

 cccggctggc cccacgcgtc agcacacgcg tccgccacg cgtccgggca gcctcggcct 60
 gcagctcatg tcgcccattg cacctgatcg ggacacgaag ccaactgctc cgagagctgg 120
 tttcttgtag cagcatgggc atcacaatgc cccacaccag ctccacgcac agcagccgca 180
 gcattaccgt gactccgctg gtggcggagt ctctggtggc acacctgccg agcagcacc 240
 tateccatg gacttctcgc gcaatgaagc ttggtgcac ccatcacacc accagcatcc 300
 ccatgaacag aaggtccttc attctcgccc tatcggacca gctgggcatg ttgggcatcc 360
 aggccatgtt gcccatcctg tgc 383

<210> 7086
 <211> 352
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-022-Q1-E1-F4

<400> 7086

cccggctggc cccacgcgtc agcacacgcg tccggagcaa gggatgctgc tcttaacgcc 60

atccagtcgc cgctgcttga tattggaatt gaaagagcca caggcattgt gtggaatata 120

actgggggaa ctgacctgac tttgtttgag gtgaatgctg cggccgaaat tatctacgac 180

cttgtcgatc caaacgctaa tctgatattt ggcgccgtca tagaccgctc actgagtggg 240

caggtgagca taaccttgat agctactggc ttcaaacggc aggatgaacc agaaggccgc 300

gtgtcgaagg gtgggcaaca aggtgagaat ggccgacgcc catccccagc ag 352

<210> 7087

<211> 412

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-022-Q1-E1-F8

<400> 7087

aagtccgggc tcgaccaca cgtacgccca cgcgtccgcc cacgcgtccg atctttgata 60

ggcatagtgt gataattggg tgtgtgcaag agtcaaattt aggttcatat tgtttacgcc 120

ccctgccatt tagctaaacg cacattggta tgcggtgaat ttcagaccag aaggtagatt 180

tcttcaaggg gaacaatgtg gtgtaacttg atcagcacia ccactttact gaagggtgtcc 240

ggatcatgat gcagacaaca acaactgggt tactcattac cactttgatg gtaatcgaaa 300

tggggacaaa cacaattgga gggaaaatat ccaaagacaa aaggagtgag ttttcacttc 360

ttcagattcc aacantcaga ataagaacta gacatcatag agaccaactt tt 412

<210> 7088

<211> 342

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-G1

<400> 7088

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ccagtggatc cacgtctgag cttgtgacca ttcacgagga cagtgggtccc atcaccagcg 120

tcaactgggc tccagatggc caccatateg ctattgggct caactcatcc gatataccagc 180

tctgggacac cagctccaac cgactggtat gtgcactctc ctgcttcaac cagaaatgca 240
 tgcacgctct gtcatagaat ttaggttgtt ttttgctgc agttgagaac tctcagaggt 300
 gtgcatgagg aaagagttgg ctactggca tggacaaca ac 342

<210> 7089
 <211> 263
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-022-Q1-E1-G10
 <400> 7089

gcgtccgcac agaaatccgc agacgcttgg gaggtcacat cgccgtgacc gtcggttgtg 60
 catttcctca atttactgct atcatgtgcg ccagatagca tttttgttta agtcgtggat 120
 cggggtggaa acattccata taatttttcg tttcgtattg acaccaatgt cgtcatatca 180
 taaaatcatc ccggggaatc tttctaatat ctgtcacact atccgaaaga acacgccct 240
 ttaatcagta tcctccttat att 263

<210> 7090
 <211> 416
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-022-Q1-E1-G11
 <400> 7090

ggggccagcc acgcgtccgc aaacgcgtcc gccacgcgt ccgccacgc gtccgagcgc 60
 acacacacac aaccagatct cccccaatc caccgtcgg cactccgct tcaagatgca 120
 gatctttgtg aaaacctga ctggcaagac tatcaccctc gaggtggagt cgtctgacac 180
 cattgacaac gttaaggcca agatccagga caaggagggc atccccccag accagcagcg 240
 gctcatcttt gctggcaaac agcttgagga cgggcgcacg cttgctgact acaacatcca 300
 gaaggagagc accctccacc ttgtgctccg tcccagggga ggcattgcaga ttcttgttga 360
 aaacctgac gggaagacta tcacctcca agtggagtcc tctgaacaca ttgaca 416

<210> 7091
 <211> 352

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-022-Q1-E1-G4

 <400> 7091

 acgcgtacgg aaagacggtg gaagcgggtg ccgagatcac cgcgccgttg ctgcccattg 60
 agcagctcct ctccgcaatt ccctccaaga gggaacaacg ccctgcagat cgatgagcta 120
 gacggcctca aagcattgca tatgcttcta ggttttgttt tgtatgcaat gttgtgatat 180
 cagagagata tctaagtttt tatattttat atgatgacga tgagaactaa gtacaagtgc 240
 ttttatTTTTT tattattcct aaagacaact tttgtatatg taacatcatg aatgtttgag 300
 gtgtctcatg tgtaacttta attaatatca atttatgcat gaaatattat gg 352

<210> 7092
 <211> 337
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-022-Q1-E1-G5

 <400> 7092

 gaccacacg tacgggcttg gcttgggact gggccgcccg gccgcgagga ataaactcac 60
 tctgccttc atacgtatcc atagccgcgg cagtacgtgt atgtggtttag ctatacgca 120
 cctcagctcg ggcgcaagct acaagcccga ccacgcgaga agaagcatcg atagtgtgac 180
 gagctaacc accagcagca acgtaatcca aatccatgga caagcagccg ctgccctact 240
 ccacaggcca gccccctgcc cccggaggag ccccggtggc gggcatgcct ggcgcggccg 300
 gcctcccacc cgtgccggac caccacctgc tccagca 337

<210> 7093
 <211> 370
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-022-Q1-E1-H1

 <400> 7093

 agcccacgcg tccggctccg caactacccc gataccattc ccaaattctc cgtcgacccc 60
 tctacaccgg cgatcggcgg cgaacgatgg ggtgggcgac gcggttcttg ggcgcgggtg 120

gcttctttgc tgcgggcgtc ctcttcgtcc cagaggctat cggttcccca tccggcgag 180
gagccgtcac cgccgccaag ctggcccacg tctctcctt tgccacctcc tggggcgccg 240
ccctctgggc caccttcacg ggcggcatca taatgttcaa gaacctgccg aggcacatgt 300
tcggcaactt gcagagcaag atgttcccgg cctacttcac gcttatatct gcatgcgcag 360
ccatctccgt 370

<210> 7094
<211> 411
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-022-Q1-E1-H10
<400> 7094

ggggccagca cgcgtccgga ctagctctat agctcgagta ttgcttgctc tccacaagaa 60
acaaggcaga gcaccaacaa tggccgcccgc ctctcgtcc tcggtcctcc tgctgctcct 120
ggccgcccgc ttggctggca tgagcgccaa cgccgccacc ttcaccatca ccaacaactg 180
cgggttcacc gtgtggcccg cggccacccc ggtgggcggg ggcacgcagc tgaaccgggg 240
cgggacgtgg accgtcaacg tgccggccgg caccagctcc ggccgcgtgt ggggcccgcac 300
cggctgctcc ttcaacggca acagcgggag ctgccaaacg ggcgactgcc gcggcgcct 360
gggctgcacg ctgtctgggc aaccgcccgt gacgctggcc gagttcacca t 411

<210> 7095
<211> 369
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-022-Q1-E1-F2
<400> 7095

tcccggtgg cccacgcgt acgcatgtcc acgcgtgcag ccgaggtga tcgcggtgctc 60
ggagcccata tcgttcaaga accccaaggc gcccggttcc ccgcgcctgg cgcagggcac 120
gtcccacgac gagatgacgg tgacgtggac cagcggctac gccatcgatg aggcgtaccc 180
gttcgtggag tggggcgccc tggtcgccgg cggcgctccg cacaccgcgc gcgcgcccgc 240
cgggacgctc accttcaacc gcggcagcat gtgcggcgag ccggcgcgca ccgtcgggtg 300

gagggacccc gggttcatcc acaccgcctt cctcagggac ctctggccca acaaggagta 360
ccactaccg 369

<210> 7096
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-D9

<400> 7096

ggggccacgc acgcgtccgc aaacgacgtc cgcccacgcg tccgcagaga ggagcttcat 60
cagctcattc aattctcgtt ccatccctcg tctcttgtgt cccgcctccg ttccataatt 120
caccagcgtc gtcctaccca tatctcctat cgtcttctcc ctgcgcctat cagcttcccc 180
aagccagcgg cgaccatgat ctccccggac accatccgca cggccatcgg cgtcatcggc 240
aatgggactg cactcgtgct ctctctctcc ccagtgccta cgttcatccg catctggaag 300
aaagggtcgg tggagcagta ctgcgccgat ccgtacgtgg cgacgctgct gaactgcatg 360
atgtgggtgc tgtacgggct gccggcgggtg caccgcaca gcatgctggt gatcaccatc 420
aa 422

<210> 7097
<211> 100
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-E1

<400> 7097

acgcgtcacc aacgcgtccg ctgacgcttg ggccgacgcg tcggccgctg cgtgttctga 60
tgcttggtat ctcccttggt cgggtgcttg cttttcatcc 100

<210> 7098
<211> 392
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-E10

<400> 7098

ggggccagca cgcgtccgca cccaagcccg cagccatgcc gccaagctc gacccgtcgc 60
 aggtggtgga ggtgttcgtc cgtgtgaccg gcggcgaggt cggcgcagcg tcttcgctgg 120
 cccccaagat cggcccgctc ggtctttccc ccaagaagat cggagaggac atcgccaagg 180
 agacggccaa ggactggaag ggcctccgcg tcaccgtcaa gtcaccgtc cagaaccggc 240
 aggccaaggt ctccgtcgtc ccctccgccc cggcgctcgt catcaaggcg ctcaaggagc 300
 cagagaggga ccgcaagaag gtcaagaaca tcaagcacag cggcaacatc agcctcgacg 360
 acgtcatcga gatcgccagg accatgaggc ac 392

<210> 7099
 <211> 458
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-022-Q1-E1-E11
 <400> 7099

ggggccagcc acgcgtccgc agacacgtgg gcaccgaccc atacgagttc taccagtatg 60
 tgcatttgtc ggaggttggg aactgtgtcg gatctggtat tgggtggtact actgccctac 120
 gaggcattgta caaagaccgc ttccttgaca ggctgtcca gagggatatt ctgcaagagt 180
 ctttcatcaa cacaatgagc gcctgggtga acatgttgcg catgtcgtcc actggaccga 240
 tcaagactcc agtcggagct tgtgccactg ctgttgaatc gattgacatc ggttatgaca 300
 ccattgtgga aggcaaagca cgtgtctgct tcgttgggtgg ttctgacgac ttccaagaag 360
 aaggttcgtt cgagttcgcc aacatgaagg gctacaataa tgccgaagac gaatttgcg 420
 acgggcgcac accgcgagaa atgtccgccc taacaaaa 458

<210> 7100
 <211> 441
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-022-Q1-E1-E12
 <400> 7100

gggtcagcc acgcgtccgt ccactactgg taacttcatt tgccttcttg tcgtgtggat 60
 atcttctcag ttcatatcat gaggtgagat ctgttggtact aaacaccctg aatagggcaa 120

gggtcactgt ggctgtggat tctttcatca ggactgggta tgtaccctcg ctgaaggatg 180
 gaaactcaca agagacaata tttaatccac cttggcgaca tgagccagtt gcaataggat 240
 caagatttgg agatgcgttt caagaacctg cttcgtttct tgcataaaaa cctttgttcg 300
 aggatgagag gtatattggt acatataacc caacaaagga caaggatatat gctttgctca 360
 aggaccaagc aaagccagat gacattctca aagctgcttt tcatgcacat gtgttactgc 420
 atttcatcaa atgctcacat g 441

<210> 7101

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-E2

<400> 7101

agtacatggc catatcgata atatcgataa aagaacaaac ttaatcctgg cgccggggga 60
 aaatgttcaa atgggcaaac tgggttaaca aggccaaaga aaggagaatc ccgtagaaa 120
 caaaaacaat ttaaacttaa caagggaata cgttccaaaa ttcaaggcta aactgagcaa 180
 tatctgtaat ggcatcctga agctgcttga ctccaccta gtgccttctt ttactgctgc 240
 tgaatcaaag gtcttctacc tcaagatgaa gggtgactat cacaggatc ttgcggaatt 300
 taagactggt cctgagagga aggaatctgc tgagagcacg atgatggcct acaaaggctc 360
 tcaaggaaat tgcccgggtt aacctggaac ctacccatcc gataaggctt gggcttg 417

<210> 7102

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-E4

<400> 7102

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 ccgccagcca acaaacaggc ctctagtc ccgaccagaac togtcgttag ccccgagaac 120
 ccgacagcgc gagatggctc ccgagctgat gacagccaag atgaccgcca aggcgcgcgc 180
 ggcggcggcg gcggcgggcg cggcgaagcc tgccacgagg gcgtacgtga cgttctctggc 240

gggcgacggc gactactgga agggcggtggg ggggctggcc aagggcctcc gcaaggtccg 300
 ctcggcctac cccctggtgg tggccgtgct gcccgcgtg cccgagtcct accgccgcat 360
 cctcgtctcg ca 372

<210> 7103
 <211> 317
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-022-Q1-E1-E5
 <400> 7103

gacccacgac gtacgcccac gcgctccgaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
 aaaaaaaaaa aaaaaaaaaa aaagaaaaaa aaaaaaaaaa gaaaaaaaaa aaaataaaaa 120
 aaaaaaaaaa aaaaaaaaaa agggggggcg gcccacaaagg ttcaatcctt agttccgttt 180
 gcttgcaatt tcatacctct tcaaagggtg cccttaattt aatttcacgg gctgtcgttt 240
 aacacccttt tgccgggaaa acccctggct ttccccacct taacgttttt ccaacaaatc 300
 cccttttcac aaggtgg 317

<210> 7104
 <211> 457
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-022-Q1-E1-E9
 <400> 7104

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 gtaaaggatg gagaccatgt cggctctcgc gaggacggcg ccgccccttg ctgggaccat 120
 tcgcgggccc tcatgcgcg tgaggccgac ggcgtccctc tccttcgccc ccgcttcaac 180
 gacgccccgc ggccggctcg ggctggggct gagcacggcg ccggcgggga gcgggagggc 240
 ggccagggct cgcgcggtcc cgcggcgcat cgctgcctcc tcggaggttg agcaaagcta 300
 cattatgatc aaaccagatg gtgttcagcg tggctctggtt ggagagatta tttctcgctt 360
 tgagaagaaa gggtttttgt tgaaaggctt aaaacttttc cagtgccccca aggacttggc 420
 gcaggagcat tacaaggatt tgaaggata aactttc 457

<210> 7105
 <211> 189
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-F10

<400> 7105

cgagaaattg tgcgggacat caaggtgacg cttgaatata tagctcttga ctatgtgcag 60
 gagttggcga ctgccaatat cacctcctgc gggttgtcaa gagctatgag ctgcctgatg 120
 ggggggtgat cagcatcggc gcagagagat tcacgtgccc ggaggtcgtc ttccatgcat 180
 ccatgtttg 189

<210> 7106
 <211> 443
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-F11

<400> 7106

ggggcccagc acgcgtccgg aaaatgagca taacagatcg agcagccctg ttattcattt 60
 agaggacca ctagtgtctt tgaaggatgt tgagcagcat ggtccaactc ctactaagga 120
 ctttgttgta cctaacacag aagaccaaca agaagccaga gatatcagct tgcaggtaca 180
 agctgtggat tccatgaaag attgtggcga agtaccagat ggaacaatag aggcttcgac 240
 gaatgatgat gaattagaac tgggtacttc tgcagatgta gaaaagaatg atcaacctac 300
 cttgctggaa ccaagatcgg agtctgtctc tgtcccagaa ctgtccgtct tggatgaatc 360
 tgacgataaa atgcaatgtg gtgtttcttg caaggatgag gaagcacatg tggaggagaa 420
 aactgtaact attgctgttg aca 443

<210> 7107
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-F12

<400> 7107

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 gctgatgggt tctctgctgg cacacctggt ggtggtacct tgctgctagg aggtagcgac 120
 agctttggca acagtaacgt tggcgctcgc cagctttggc aacagtaacg ttggtgctcg 180
 ccaggcgctc aacaaaacac ctgaaaccaa agttcgtata gtacctgtca agcgctcgac 240
 aaattgtctg catcggaata tcattagcaa cctcgcggtat tcgagtcaaa tattgaaatg 300
 gtgagctaata ttgctatttt attgactggt ttgatgaatg aattgatagg tgtgtaaaaa 360
 aaaaaaaaaac caaaggaaaa caaacagcgc cacaaaagaa caaggaggag ccacgccgac 420
 gagcgaggcc 430

<210> 7108
 <211> 376
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-C2

<400> 7108

cccgggaggc cccacgcgtc agcacacgcg tccgcatcga cctactccag tgaaaaagcg 60
 tccttctgtg tccaactcta tggccaactc cgctgttgcc aagaacacgt cagcaccatg 120
 ctcaagatca tcaactccaa cctctcggtc tcgaaccttg tccagttcat ctccaagcag 180
 tacaagtgca gtgagccgtc ccagctcatc ctctggtaaa gttcctgcaa taacttatag 240
 cagttcttca tcaagtacag tttcttcagt gagccgtcct agctctcggt catccacacc 300
 cactcgtcaa cctgccatgc gttcgtcaac accatctgct aggcggattt ctggtagcaa 360
 taacatgaca tccaat 376

<210> 7109
 <211> 352
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-022-Q1-E1-C3

<400> 7109

ggctggcccc acgcgtcagc acacgcgtcc gccacgcgt ccgcagcttc aacacggcca 60

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 gaccgagcag cagcggcagc tgcgacgccg gaaggtggca ggggaagcgg ctcaaggcgt 180
 cgcccaactc gggctccgcc gccaccgcgg tgtcttccac gtcgacggat tcggagctgg 240
 cgcggttcgg ggacatcgac gtcgtggcga cgccggtggc caggtttcac ggcgaggtta 300
 ctangaggat ggacgagggtg ggcgagggcc cgtggatgta ccgctgcctg ag 352

<210> 7110
 <211> 448
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-D11

<400> 7110

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 ccgaccaaga gcttcagcat ctgaggaatt gcttgccctga tcaagtgggtg gttcagcgca 120
 ttgatgagag gttatctgcc cttggcaatt gcatagcctg caatgaccat gttgcactta 180
 cgcaccctga ccttgacaag gagactgagg agttcattgc agatgtgctt ggggtcgagg 240
 tgttttaggca gactattgct ggaaatatcc ttgtggggag ttactgcgcc ttctctaaca 300
 ggggtggttt ggttcacccc catacatccg ttgaagacct tgacgagctc tccacgctcc 360
 tccaagttcc tcttgtcgca ggaactgtga acagaggaag cgaggtcatt gctgcaggca 420
 tgacagtgaa cgactggact gcctttttg 448

<210> 7111
 <211> 330
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-D3

<400> 7111

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 cgtggaccgc tgggccgggg ccaggtaccc ggccgtgcac cgcttcgtgg gcttcgtggc 120
 ggacgtcgac gtcggggaac agggggcgcg cctcgaggcc agcctccagg gcacccggtg 180
 ggccgccgcc gtcaacgacg cgcgcatggc cgacccggcc tcgccctaca ccgtcgcgca 240

gtacaactcg cccttcgagt tcaccggcac ggccaaccag atctgggtgc tcttccgacc 300
cgacgactac gccagtactt cgtgatgcga 330

<210> 7112
<211> 331
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-B1

<400> 7112

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aaccaaacag ggactgcgaa tcaagggtgct cgagataaaa taattagttt ggcgaacagg 120
tacatgactg aggtgaggcg attaaacctt ccacagaacc aaacggagaa tgtctaccgt 180
ggtttccgtg aacttgagga gaaattacta tcttcttatt aagcagattg cagtcattcc 240
tcaagatagt gaagaatgat cttgcatctg ttgtaccaca aaaccaagga atagagtcca 300
gggcttcttg attcacctca gcatgatctg t 331

<210> 7113
<211> 464
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-B11

<400> 7113

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gcgccacaga acgggcgcat cgtggcccgg ttcgggttcg gggtgggcgg caaggcgaag 120
cctgctccga agaagggtggc gaagacatcg acctcctctg accggccgct gtggttcccc 180
ggcgccgtgg cgcgcgacta cctggacggc tcgctggtcg gcgactacgg gttcgacccg 240
ttcgggtctcg ggaagcccggt ggagtacctg cagttcgagt tggactcgct ggaccagaac 300
ctggccaaga atgaggccgg cggcatcatc ggcacccggt tcgagtcctc cgaagtcaag 360
tccaccccggt tgcagcccta cagcgaggty ttcggcctcc agccgttccg cgagtgcgag 420
ctcatccacg gccgctgggc catgctcgcc accctcgggg ccct 464

<210> 7114

<211> 331
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-022-Q1-E1-B2

 <400> 7114

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 gttcctctcg agtctcggca acgacgaaaa cgaaaatacc gagtcgagtc agcgatgaat 120
 cccttcgccca aaaaaccaac accgcgagag gtgatgcgga gcagcaagcg ggacctgacg 180
 aatgctacgc gagggatcga gagggacatt gcgtcattac agcaggagga gaagaaactc 240
 gttgctgaaa ttaaaaggac agcaaaaact ggcaatgagg cagcaacgaa aattctagcc 300
 cgtcagctga tcaggttaag gcagcagatt t 331

<210> 7115
 <211> 302
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-022-Q1-E1-B3

 <400> 7115

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 caattgcatg acaaagaaca ggatgttcta gacctgcggc aagaagttat tgggttaaaa 120
 cattctctaa aagaggctaa cgaccagtgc atacttctgt tcaatgaagt tcaaaaagcc 180
 tggacagttt catcttcaact ccaagctgat ctcaagtctg aaaatttaat gcttgcccag 240
 aagcacaata ctgagaaaga gcagaataga cagctaaggg atcagatttc tcattctttg 300
 aa 302

<210> 7116
 <211> 347
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-022-Q1-E1-B4

 <400> 7116

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gcccgttcca gaacctgctc gaccacctcg ccgaccccggt caacaacaac gtgctcacca 120
gcctcaagtt ccactagaac gttgggtgcat cagcatacct gctgccgccg ccgccagttg 180
tttgctgtgg aaagctagat gcatgctgtg tgtaaaggaa cctgaagcgt tgcacggtc 240
atgattcatg catggccagc ctgctgcctg taacaacaaa ctagtattga tcttattgag 300
accggaaact gtattgcaca tggtaaata atgtacaatt cctccct 347

<210> 7117

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-B9

<400> 7117

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agcgggtgggg tccgctgagg cctagttatc ttgttcgctt ctgctaccgt gttcaccccta 120
gtctagaggg gggtttatctt cgtctgtggt cgtctcgtgt ccgtttgttt cgtttcgtgt 180
tcattgttgt tgttgcccat ctgtgttttt gaccgcaagc tcgctcctct gatgttggtta 240
gtgatgtcta caatcgctca atcccgagcc tgcattgagc tccaccgatt atcttatctg 300
gctataacctg cagttgtgca tttgattccg acgggcctaa acctgaacac gccaatatta 360
aacattgtac aaactacaag tgctccaata aagaacacaa agattcagg 409

<210> 7118

<211> 368

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-C1

<400> 7118

ccggctggac ccacgcgtcc gcaagaagtt cttgaagggt cacgttgagg ctgaccagat 60
cgtcgcttgg ttgaaggagt actttgatgg caaattgacg ccgttcagga agtctgagcc 120
tattcctgag gtcaacaatg agcctgttaa ggtggtgtc gctgacaacg tccacgactt 180
cgtcttcaaa tctggcaaaa atgtccttat tgaattctat gccccctggg gcggacactg 240
caagaagctg gcgccccatct tggacgaggc agccaccact ctccagagcg acgaggaagt 300

cgtgattgct aagatggacg cgactgccaa tgacgttccc agtgagtttg acgtccaagg 360
ctacccga 368

<210> 7119
<211> 438
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-H10

<400> 7119

ttcgcgcggt ccacccacgc gtacggatga tcttctcttc tatgacattc taaatgagtt 60
ccagaaaggt cacagccaca tggctgtggt agttaaacga acaaaggaag caggagtatc 120
cactgaaaac caaaagagca caactgcaga ttataaaata aacccaaaga tgctcatgct 180
gatggctcat ccccttctta tgctaacaac actgctggaa gtcgtagatt taacatagag 240
aagcatggag acgggcgctc atgtaataag aaatcagaaa agaagcgga aaatattctt 300
gattttaaca cagatccact tccaagctat tcaatggatg aggcggcaat ccgaataatc 360
acgatggaaa atgttatggg agaacttcta caggaagaaa tctatgatga aacagatgag 420
tatgtttaag ttcaaaac 438

<210> 7120
<211> 283
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-H12

<400> 7120

ccacccacgc gaccgcaaac gcgtccgcgg acgcgtgggc gacgtgcggc atgggtggga 60
ggcgcagcaa cgggcagttg aagtctctggg gcttcgacgc gcacaacgaa gccgtcgagc 120
aacgacgcaa gcgatctgct cgtctgcacc ggtatcgacg tcgaggtctt tacggcggag 180
gtggctgatt ccagcagcat cgctgagctg aggatctact gcagacttct cggaacgac 240
gactttgatt gcgtgagcct ccactctggc cccgaaatcc ggc 283

<210> 7121
<211> 346
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-H5

<400> 7121

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gcactggacg tcgttgggga ataacgtgcg cggacggcgt cagaagcctg ggatggccgg 120
ccggcgccgc cgcgggtata cctaccaacc atatgatggc cgtcatggta catggtctca 180
aattaaccag caaggttaag catgcatata tacatacaca catatatata tataaggtgt 240
ggtaagttag gtagcataag cagggttaagc tgtatatgat atgaggtgtg gtataaagtg 300
tagggattat tattgggtatt atttttggta gcttgaagat tcgtct 346

<210> 7122

<211> 342

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-H7

<400> 7122

aggacgcgtg ggcggacgcg tgggcgatgg ccggcacccc catcaagggtg ggctccttcg 60
gcgagggccg catcaccatg cgcaagaccg tgggcaagcc caagggtggcg gcgtccggca 120
gccccctggta cggccccgac cgcgtcaagt acctcggccc cttctccggc gagccccga 180
gctacctcac cggcgagtgc cccggcgact acggctggga caccgcccgg ctgtccggcg 240
accccgagac cttcgccaag aaccgcgagc tggaggtgat ccactcccgc tgggccatgc 300
tcggcgcgct cggctgcgtc ttccccgagc tgctctcccg ca 342

<210> 7123

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-A10

<400> 7123

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ttgcctcctt atgctccttg gtctttctgc aagtgtgtgt acggcgacca ttttccaca 120

atgctcaciaa gctcctagag cttcccttct tccctcgtac ctctcaccag cgggtgtcttc 180
 ggtatgtgaa aacccaattc ttcaacccta caggatccaa caggcaattg cagctggcat 240
 cttaccttta tcacccttgt tcctccaaca atcatcagcc ctattacagc agttaccttt 300
 ggtgcattta ttggcacaaa acatcagggg acaacaacta caacaacttg tgccagcata 360
 ccttgctggc tactctcagc aacatcagtt tcttccattc aaccaactag ctgcagtga 420
 ctc 423

<210> 7124
 <211> 447
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-022-Q1-E1-A12

<400> 7124
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 tccgcctcct cgctctccac caccgccgtc gcggcgctcc ccaggaatgg gcagcagcgg 120
 gcgtcgtcgt cgttgttctc ctctctctcc tcttctcctc tcctcgtcgg caagacgctg 180
 ctgaggcagg ccgaggcagc ccggccgtcg ttcgcctgac gcgccgcggc ggattccgac 240
 aggccgatct ggttccccgg cagcagccct ccgcctgggc tcgacggcag ccttccccgg 300
 gacttcggct ttgattcctg gggcctcggg tctgaccogg agagcctgcg gtggaacgtg 360
 caggcggagc tgggtgactg ccggtggggc atgctcggcg cggcgggtat cttcatcccg 420
 gagttcctga ccaagatcgg ggtcctc 447

<210> 7125
 <211> 424
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-022-Q1-E1-A2

<400> 7125
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 aatcaggctg tggagcgggc agctggtact gacggccata agataacata cagtgtcata 120
 aagcatcggc tgggggatct attttatcgc ctagtatccc aaaagtctga ggatcctgca 180

gaaggcgaag aagctttggt cggcaagttt aagaaactgt acgacgacct taccactggg 240
 ttccgcaacc tagaagatga ggcacggtga actgctgtag attttgtgta agacaataat 300
 ggctgccaaa tggtttataa ggtacggaag ttgtanattg agaccatggt tgagaatttt 360
 cccaacggt aatcaattcc ttggcaacaa caatttttagc catcattgct ggatgggcac 420
 cctg 424

<210> 7126
 <211> 349
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-A3

<400> 7126

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 tccgccc aaa tcaactgggac caccaccgcc ttcttcaaga tcggcggggcg ggcaccggcc 120
 ggcgatgaca tccaccgtca ccacaaccgt tgggtgcggg gggctccccg tccgcccgtt 180
 gtcgacagcg accagaggac gccacgcag atgcgccgtc cgagcccagg ccgcgggagc 240
 ggatgcctcc aatgataagt cagtggaggt catgcgcaag ttctccgagc agtacgcccg 300
 ccgctccaac actttcttct gcgccgacaa gacagtcact gccgtcgtc 349

<210> 7127
 <211> 340
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-A4

<400> 7127

cccacgcgtc cgcggacgcg tgggtttttt tttttttttt tttttttttc aatctgaaaa 60
 cacatgcact gatgcacact tgtgtttgtg tagaggcgct tatatatcat ccaaaagaca 120
 agtcactcac acgcaaattc gcattggcta acagaagcta tttggaatgc agttcagtcg 180
 actaacaacg taggtacccc cgtctccttg ttttgccgat gttggcgatg ccatcatatg 240
 tcagcagcaa ggaagttgcc agacaaggaa acctgccaat cggagaagca gcagcagtga 300
 acgttcaaga tccagagtac aatcgacaga catattttga 340

<210> 7128
 <211> 232
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-021-Q1-E1-F4

 <400> 7128

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 cggtggcgct ttctccggca aggaccaac caagggtgac cgcagcggag cctatgtcgc 120
 gaggcaggct gccaaagagca tcgtcgccag cggccttgct cgccgcgcca tcgtccaggt 180
 gtcctacgcc atcggcggtgc ccgagcctct ctcggtgttt gtcgacacgt ac 232

<210> 7129
 <211> 397
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-021-Q1-E1-F5

 <400> 7129

 atccctccgc cactcccatc catctcctcg ctcccagtcc cccggaagct acgaagcatg 60
 gcgtccgtca ccgcccgcgc cccggtcgcg gcccttcgcc cgtcgtcggc cttccttggc 120
 cactctagcc gcctcggccg caccgcgtcg cccacgaggc gcagcctcaa ggccggaggcc 180
 aagggcgagt ggctccccgg ccttcctctc cctcctacc tcgacggcag cctggcgggt 240
 gacaatggct tcgaccggtt gggcctggcg gaggaccccg agaacctgcg gtggttcgtg 300
 caggcggagc tgggtgaacgg ccggtgggcc atgcttggcg tggccgggat gctcatcccg 360
 gaggtgctga ccaaagccgg ggctgatcaa agcgccg 397

<210> 7130
 <211> 342
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-021-Q1-E1-F7

 <400> 7130

 agccgccctt tttttttttt tttttttttt tttttttttt tttcaaaaat agttcatctt 60

ttattttaatt atccattact cactgagcag aggtggtctc tacaccctca aggccaagcc 120
 cttacaacac accagcatat ttctcagtta acccggtgaa ttaggcctct ttaagcttct 180
 tgacggacat tgctgtcaga agcgaatcag acccagcctg atggcaaatt ccaatccttg 240
 aaacatcaat gcagtaggca ccatccgtgg gtcagcatca gcagcagcag aagttcttca 300
 tccgcgacga taagccattc atgagccaca tggggtacat ca 342

<210> 7131
 <211> 449
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-F9

<400> 7131
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 cgaggtagct cgccggaaga cctcacctgg acttttccga cgcacctcc acacactctt 120
 taaccctccg gaatggccgc ctgcttctag ctgctcgacg cccaatctc cgcttgcttc 180
 ctcgacagcc ccatccgctt cttctcgctc tcgctacggc tctctgctt gttcgccatg 240
 gcgatccgca tcacgtctc ctactccggc tacgtggcgc agaacctcgc cgcgtcgctc 300
 ggccaccgct tctcctccgc ctccgcctcg ggcagccgcc tcttccatga cggcgccctgg 360
 cgcccccttct gcattctcac ctccaaccgc cagccccgagc agcaccgogg gagccgcagc 420
 gaccgccatg acggaagcga ctacaaaca 449

<210> 7132
 <211> 361
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-G11

<400> 7132
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 aggattagaa taactgggca aacgaatata tggatatgt cgatatgtaa agatgcaata 180
 tagagcagca tatatggtac cgtcgttatt agcatttttt cagaaaatgt aataatattc 240

aaaacacaaa ctacggggca tccttggttg caaacagctt gaggacgggc cagacgcatg 300
 ccgactacaa gattccaata cagataggaa gctgcacctt gctgctccgt cgcattggaaa 360
 g 361

<210> 7133
 <211> 362
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-021-Q1-E1-G2
 <400> 7133

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 tgctgtcgtg ggcgcgccctg gccacgtcag acgtgcacgt cgacggggcac ctcatccccg 120
 ccgggaccac cgcgatggtg aacatgtggg ccattacgca cgaccagac gtgtggggccg 180
 agccgacgga gttccagccg gagaggttca tgggggtccac cgagttcccc atcatggggg 240
 tcggcctcaa ggcccccccg ttccggggccg gccggcccaa ctggccccggg aaaaacctcc 300
 ccatggggcac cgtggccttc tgggtcgcga cctgtctgca cgaattccag ctgctcccct 360
 cg 362

<210> 7134
 <211> 432
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-021-Q1-E1-G5
 <400> 7134

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 atttcctggc aaagaaaaat atgaacttag gtaaggctgc attgatcact gtcggggggac 120
 ttgcagctgg tgcaactgtc ggatctgcag tggaaaattt cctgcagggt gatatcgtgc 180
 cctttctagg catccactcc cccgccgtcg ttgtcagtga atttattctg ttctcccagt 240
 tggttggtatc actgtttggt aggtaggatc tgaaatcaag ctgtcatcct gatcatggca 300
 tgtaagtaac tgaaatgggt cgtgttcaaa cttcaaaggg tcagggaat gcttattttc 360

cgctcaagggt gcaagcagct gtgtatagca nacaatacat ggacatctct gtcccttata 420
aagatcactt gt 432

<210> 7135
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-G7

<400> 7135

agctgtgctc actgcctact ttttcattct aggcattggt gctctctctg caacactgct 60
tccttctata aaacgttttc ttccaaaaga gtggaatgat aatctcattg tctggcgtgc 120
tccacttttc cactcactct cgggtggagtt cacaaagtcc cagattgttg cttcaatacc 180
tggatttttc ttctgcttgt ggtatgcgtc aaagaagcat tggcttgcaa ataatgttct 240
gggattggct ttctgtattc aggggattga gatgctgtca ttgggatcat ttaaaaccgg 300
agccattctc ttgggtggac tttttgtgta tgacattttc tgggtgttct tctactccagt 360
tatggtcagt gtggctaaat cttttgatgc tcctataaag cttctgttcc tactgcggat 420
gatgc 425

<210> 7136
<211> 83
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-D5

<400> 7136

cgacccacga gtccgaccac gcgtccgcc acgcgtccgc ccacgcgtcc gccacgctt 60
cagcggacgc gttcacggtc gtg 83

<210> 7137
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-D7

<400> 7137

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 agcagcagca gggccagggc atggcggcag tggcgtggt gctgctggtg ctggcggcgg 120
 cggcggccga gacggcgtcg gcggcttcgt gcaacgccgg gcagctggcg gcgtgcgcgc 180
 cggcgatcac tgccggcgcg acgccctccg cgtcgtgctg ctccaacctc aaggcgcagc 240
 aggggtgctt ctgccagttc gtgaagaacc ccacctacgg gcgctacatc aacagcccca 300
 acgcgcgcaa ggtcgtcgcc tcctgcggcg tctccgtgcc gcgctgctag tactagtacg 360
 tgtgctgtgc atgcatgcat gtacgtgcgc acgtgggctg atcttctctg ttgtttcgtg 420
 tcttgccgcg cgccatcagg tgt 443

<210> 7138
 <211> 363
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-021-Q1-E1-E12
 <400> 7138

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 cgcgcccgac tccctctaca aagccaagct tatccgtggg ttctgccacc tctacgacgg 120
 ccaggaggcc gtgcgcgtcg gcatggaggc cgccatcacc cgctccgatt ccatcatcac 180
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 <223> Clone ID: LIB189-021-Q1-E1-E3
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cgccggaaat gaagaccatc ctggccacgg agacgatgga catccccgag ggagtcacgg 180
 tcacggtggc ggccaagctg gtgacggtgg agggggccgcc cggtaaagctc acccgcaact 240
 tcaagcacct caacctcgac ttccagctgc aggacggggg tcccaagccc aaggtcaacc 300
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<210> 7140
 <211> 363
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-E5

<400> 7140

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 gcaagaaccc tcgaggaggc ctctgctacc gtgactgccg cactcaagga tgcaggggtc 180
 cagctgtaga attggcaaca cgctgatact cttttttatt aatgggtatga aatgttaatt 240
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<210> 7141
 <211> 134
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-E6

<400> 7141

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<210> 7142
 <211> 367
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-021-Q1-E1-E7

<400> 7142

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gtacgatgac cctgcagaac cagtcagcca cagcaatcca cacatgcact tcgacgtcac 180
acgggcgctg cgcacagaca caccaagcgt cggcatcagt ggcttactac caggaggtgg 240
actacagctc ggaggaggtg aggtcgggtg ccccgccgg agtcggccgc cacggcggcg 300
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<210> 7143

<211> 301

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-E8

<400> 7143

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agagcgccgg atcatgggca tcctccgca agtaaatggt ctacacctcc acaaatcatt 240
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<210> 7144

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-F11

<400> 7144

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cgacgtggtc cagctcgggt tccggcgacg accaccacgc ctactccgtg ttggcgacgt 180
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tcattggcgc caaacgcttc aaccagctga gggggaacgc aatcgcgctg cactcccagg 360
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gcctcg 426

<210> 7145
<211> 421
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-021-Q1-E1-B9
<400> 7145

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tccctggcct tcgttttata ccttcttttt cgggaaaatc ctttcttttt cccatttttag 240
ttttgttaca tcccgctctt ttttcaagtt ctgggttttt atccatgtgc ccttttcggt 300
tccccctttt ctacatttgg gccccctttt tgtcgacttt aatttccctt ggggggtgtc 360
attaattccg ggggttttcc tggttccgtt caacttgtcc gggccccctt gcttctccct 420
t 421

<210> 7146
<211> 428
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-021-Q1-E1-C10
<400> 7146

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ccctccctc ttgatggca ccaccaggct gtacgttgcc tatcattgcc cgtacgcgca 180
 gcgcgcttgg attgccagga actacaagggt tttgcaggac aagattaaga tagtcgccat 240
 cgatcttget gacaggccaa catggtacaa ggagaagggt tatccagaaa acaagggtgcc 300
 ttctctggag cacaacaacc aggtgaaagg tgagagtttg gatctgggtca agtacattga 360
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 ggagctgc 428

<210> 7147
 <211> 411
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-021-Q1-E1-C12
 <400> 7147

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 gctgattgtc cagaagagga gggctgcact cagtgacttt gacaggttca aggtcatgct 180
 ggcaaggatc aagatgggtg gtgctatcag gcacgagctc tccaagctga acaaggcgtc 240
 cactgcttaa gtcccttttg gtggatgaca tgttagtttt tggtttcatg ttggatcagc 300
 aatttgtttt gagtgttgtc aaagccagaa ttagtaatat gtttcctgtg taccagtttc 360
 aaactgtcat caaatgggt gtgctctgga tattttgtcc ggaatgatat g 411

<210> 7148
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 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-021-Q1-E1-C8
 <400> 7148

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 tgtgatgatg atcagacctc tgcagatacc tctgctttat caaagatcac ttcgactggg 180
 gcaatgacat tctgcttcat ccaagctatt gaacgtggac agggcaccac ctacggtagt 240

atcctgaact ctatgcgttc cacaatacgc aacacaggtg actcagcggg tgtatgtggc 300
 cgtgctgtta catcac 316

<210> 7149
 <211> 368
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-C9

<400> 7149

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 ttgggcgacc gctacgacga acgcaaaggt aagggatcac gcagggcatc tcaactggccc 180
 gttcggtagg gcttacatga gagaggaaat gcgactggca tgcctatgcg cctgcatgtg 240
 gcgctgcagg cggatcgtaa agagccaggt gaacactcac cgcacccctc gctcctgctg 300
 ctgggcatgc tgccagggag acgctgctgg acagactacc taactgcaca gctgagcaga 360
 gagacgag 368

<210> 7150
 <211> 86
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-D10

<400> 7150

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 ttcacccttt tgttcattgt cctagg 86

<210> 7151
 <211> 420
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-B8

<400> 7151

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 cgcatcctcc cacctgggac cacgcgagcg acgccgccga cgccgacgcc atcgacgacg 180
 cgtcctcaga tgccagcgcc agcgacgcgg agctgtgctg catctgcttc gaccaggcgt 240
 gcacgatgga tgtgcaggac tgccggcacc agatgtgcgc gccgtgcacg ctgcgctgt 300
 gctgccacag caagcccgac ccggtgacgc tagcgctgcc gtcgccagcc tgcccgttct 360
 gccgcggcag catctcgcgg ctgctgctgg tggccccggc aagcagcgac gacgcagaca 420

<210> 7152

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-A10

<400> 7152

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 ttcgaagcct ttagaatcat taccatatga ttctcctggg cagacctttg tcgcttttga 180
 gaagccagaa ggtgtcattg ctactggcaa gttctcaa atcctgaaat tcattgttaa 240
 ggaggttgat ccatccacgg gtgaaactga agatgatggg gttgaggatg agtaccagct 300
 tgaagatctt gaaatagttt ctgctgatta tatgttgaag gtgggagtat ctaacttccg 360
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<210> 7153

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-A12

<400> 7153

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 gaagcccccc atctccttgc cctgcggcgg gtttatgggg ttctcgctgt accccatgaa 180
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ctgcttcctc tgagcccgcc ccacccgcgt cgatcacctc ggcggcgggc cgctgttgct 300
gcgcggtcct agcaccggtt cgagtgtgtg tgtttggtt ctttgagttt caagattggg 360
ttttgttgcg ttattgggga gacgaaggga cta 393

<210> 7154
<211> 441
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-021-Q1-E1-A6
<400> 7154

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tgtggtgtgt cacagttgct ctttttattt tgggtgggcat agtagtgtgg cttcttgaac 180
atcgtactaa tgaggaattt cgaggggtctc caaggcgaca agtcataaca atgttatggg 240
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tcgtgctgat aatatgggtt ttcgttgtgc tgatcatcac ttcaagttac acagctagct 360
tgacgtcaat cctcacagtc caacagctct caactggaat tacagggatt gatagtttgg 420
tttcaagttc tttacctatt g 441

<210> 7155
<211> 344
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-021-Q1-E1-A7
<400> 7155

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catcgtacta atgaggaatt tcgaggggtct ccaaggcgac aagtcataac aatgttatgg 240
tttagcttct cagcaatggt cttttcacac agagagaaca ctgtaagcac acttgggcgg 300
ttcgtgctga aaatatgggt gttcgttgtg ctgattatca cttc 344

<210> 7156
<211> 307
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-A8

<400> 7156

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gagcaccacc agctgaaaga tggcgaggat accgtctctg aagagcctca atgcgtttcc 180
acatgcggaa gagcacttgt tgaagaagac ttactctggc gctgttgatga caatttttgg 240
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cggggca 307

<210> 7157
<211> 354
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-B6

<400> 7157

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gcatagttgc atactttgat catggaagct ttcttggaac gatggccgaa gaaaccacct 120
tgctggcaaa ttcgtatgga agaaatgaag gaaccaaggg catacatcgt ggaagaaagc 180
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tgagctcagg caaccctcat ccttagctcc agctgggtgc attccctaaa gtctgtacat 300
gtatagcctt ccactcatca tatgctgggt atccgacctg tagacacata cggt 354

<210> 7158
<211> 104
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-A1

<400> 7158

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gctgtcgccg cagcgacgat gtggagctcg ggctctgacc gcga 104

<210> 7159
<211> 390
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-G11

<400> 7159

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tcctcgacga ggaggacggg gaaggcgaga tgttcttcgc cccgcaccgc gcggccccgcg 180
gcggcgctgg cgatgcccgc gggccccctcc ccttttccgg gttcttcaac agcttcgacg 240
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tgttgttcgt ggatcgcgaa tcgtgttatg tcgataccgt gatgggggtct ctttaattagc 360
gcatcgattc agactcgttt gggcaatctg 390

<210> 7160
<211> 329
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-G12

<400> 7160

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cctgtgtgac acatttatct ctgacaagaa ggcatttgga ggtagcacc ccaagactgt 240
ttctgagaag gagtgggtggc aagccacaga caccaagtgc caggcctggc ctgcgactgg 300
tgggccaccg gttgtcatga accccatca 329

<210> 7161
<211> 417

<212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-G3

<400> 7161

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 ttcacctcct gaacagagca gtaaaaagaa agagtaggaa catgggtgcac ctacttgtga 180
 agttcgttgt aatttgcccc gacaattcca aggtttaccc ctcccttccg aacttgccctg 240
 gccctggtgg tttaactccg ctgcatcttg ctgctgccat cgagaatgca gaggatatag 300
 ttgacgcctt gacagacgac cctcaacaga ctggtgtaac ctggtggcag acagttctag 360
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<210> 7162
 <211> 293
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-G6

<400> 7162

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 gccgatgggg caacagtacg gggcaacgcc tccgcagcag cctccggcga tgtggggcca 180
 gcctccgccg caggcgcact acgggcaggc accaaccctt cagcagtact acgccgcgcc 240
 gccggtgccg gtgcaagcgc cagccgcccc cgctgcggcg gacgaagtca aga 293

<210> 7163
 <211> 259
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-H11

<400> 7163

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tagctgggttt gaggtgtgga ctacgagagt acttttgttc agtgtctggg atctagtagc 180
tgaagggtgtt tgcttgaact ctgtgaactg tgatgtggga taatgctaag aagatgaata 240
gatgatcggtt gggttgtct 259

<210> 7164
<211> 421
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-020-Q1-E1-H3
<400> 7164

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g 421

<210> 7165
<211> 329
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-020-Q1-E1-H4
<400> 7165

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ctgtacgcat tcagcagcgc acggcatgac gaagcaaaag atagtgatca agctcagcat 180
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ctcgatggag atcgccggcg acggcaagga ccatctggtg gtggctggcg tggacgtcga 300
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<210> 7166
 <211> 417
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-020-Q1-E1-H5

<400> 7166

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agcctacatg aaaacacatg caatgaggtt gttctttgaa gatgctgact tccctcaagc 360
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<210> 7167
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 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-H7

<400> 7167

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taccgggcta tctccaatct gtaggagtg caggaagctg attttaaagt ccattccttc 180
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caagcgactt t 311
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 <211> 356
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-H9

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ggattgcata gtgtgcctcg agacgttga ggcggcggac gaggtgcggc ggctgggcaa 180
ctgcgcgcac gccttcacc gcgcctgcat cgaccgctgg atcgacctcg gccgcgcgac 240
ctgcccgtc tgccgctccg acctcctgcc gcgcgcgccg ggctgggcca gccggctcgg 300
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<210> 7169

<211> 413

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-020-Q1-E1-F7

<400> 7169

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atacaaaccg ccacgttgac aaatgtgtct gttcatcaa acccggtgtg atcctgctgt 120
cgtggaccga cgacgagaag gaccatcagt acgaacggtc ggtcgaggca ctgtctgttc 180
tctcccagtc cgtcgacgcg aaagggcggc agtccaagt ggtgaagatc cacgtccccg 240
ggcctctgta catgacagag gaagaggcac aaggcggtgt ttcacggga cattctgtgc 300
cgaggccagc gggcacgaga ttggccgcct cgtacgtcaa cttctacatc gccaatggcg 360
ggatcatagc gccttccttc ggcgacaggt gggacganga ggcgtacgcg gtt 413

<210> 7170

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-E11

<400> 7170

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tcaggttata gttgttactg atggtgaacg tattttgggg cttggagatc tcggatgcc 120

ggggatgggg attcctgttg gtaaactttc cctttacact gccttgggag gagttcgtcc 180
 atctgcttgc ttgccgatca cattggatgt tggtagaaat aacgaggagc tgcttaatga 240
 cgaattttac attggcttga gacaaagaag agccactggc caggagtaca ctgattttct 300
 gcaagaattt atgactgctg tgaaacaaaa ctatggggag aaagttctta ttcagtttga 360
 ggattttgcc aaccataatg cttttga 387

<210> 7171
 <211> 377
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-020-Q1-E1-E12
 <400> 7171

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 cagatacgtc catgacaagt gctttgcaga attccacaag tcgctgacgc tctacactga 120
 acatctcagg gctgagtttg ctgcaaacac aagacgagtg atggagctgg aaacagaaga 180
 cgagatcgtg cctagcatag cagctagcgt gaaatcgtgt tgaaggcaaa tgccccacgg 240
 tgttgatgt tgctctcatc atcagatatt tgctggctta gctatttcca gcctcattct 300
 acttcattca tgtcacttga ataatccaat tcatggcaat ttgtactgtc cctaaaccta 360
 gatggcctaa aatccga 377

<210> 7172
 <211> 401
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-020-Q1-E1-E2
 <400> 7172

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 gctgcttctg agaagaggca acggaaactg aagagtggac aaaagttgag ccggtttcag 120
 gagagctctt acatggatcc aaatcaaagt ctttgcttgg gagcactatt taacatagca 180
 gcaacaaatg gcctagacat gggcagaaga ttatgcatct ttggcttttg ccgttctatt 240
 gaaatgttaa gcgatgtagt ggaagatacg gtattggagc atggcgggtga ggttgtcact 300

gcagagaaag caagcagtaa cggcctccag gagaagccaa ccatgtctgt cccagttaca 360
 ttgctgtggg gcattcctcc agcatcagag accctccatg t 401

<210> 7173
 <211> 407
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-E3

<400> 7173

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 agcattgaga agcacacgct cgccagccat ctagtatggg gcctctgggg aataatttcg 120
 gaccatgtta acgacattga cttcgactac aaggagtatg cgaggcagag attcgagcag 180
 tactggcaca agtctgcgat cttaacatct tgaacatgtg tataaacacc cgtacgtggt 240
 ctcaggaaact ccctgagggc ctgtggctgc acacacgaaa ttgtgcagtg ccactgacac 300
 atagataagc tgtgaaagaa gaaatactga cgacgacgac gaataatccc gttttgggct 360
 cgggagggtta tttctccgca actcgatgag cttcaggctt cagcttc 407

<210> 7174
 <211> 221
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-E5

<400> 7174

ccacgcgtaa agcaacgcgt gggccgacgc gtggggcaga ttgggggttc cttggttcct 60
 cgtcgagttg ctgcttctga taagaggcaa cggaactga acaatggaca ccagtggggc 120
 cggtttcagg acagctccta catggatgca gctcaccctc tttgccttgg accactattc 180
 aagataccag caacacatgg cctagacacg ggcaccaaga t 221

<210> 7175
 <211> 424
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-E6

<400> 7175

cccacgcgtc cgcgagcgcg tgggcagccc aatgctaata accaataactt gccccattt 60
gtgatagttg atgacagcgg caaagctgtt gggcctgtat tagatgggtga tgcagttgtc 120
actatcaact tccgggctga tcgcatgggt atgcttgcta aagcactaga gtatgcagat 180
tttaacaatt ttgaccgtgt acgtgtcccc aaaattcgat atgctgggat gcttcagtat 240
gatggtgagt tgaagcttcc aagtcgctac cttgtttccc caccagagat agatagaaca 300
tctggggagt acttggtgaa gaatggcatc cgcacctttg cttgcagtga gacagtga 360
tttggccatg tcacatTTTT ctggaatggg aaccgctcgg gatactttga tgaaactaag 420
gaag 424

<210> 7176

<211> 323

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-E7

<400> 7176

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acaatagagc aacaatggcg gccaaatat tttccatcct taagctcctt gctctttctg 120
caggtgttgc ttacgccact attttccac aataactcaa gctccgagtg ctgcccgctg 180
tcattcatat attccatcaa tgagtgttg attatgtgaa catgcagctc ttataccta 240
caggttcgtg ctgcgaatcg caccaagcag gccagtttca gcagaccgt tcttgtaaaa 300
tgccgccagc cccatctttg gtc 323

<210> 7177

<211> 292

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-E9

<400> 7177

agggccatag ggcgatgaag gcgccagttc catctgttct tcaaagagag agtggaccag 60
atcatgcaca gggatgatcc aatgaagcag ctaccgcttg ccagtccaat gagatatgta 120

tattttttgta aaggagatac atcgtcggca gatttttttt tctgtgctgt ctttcttggt 180
 cgtaagaaat gtatagacct tcgagttctg ttgtgcattt gagctccgtc atgcatgggt 240
 gcttctgatg tgaggcacga ttattgaaga gacctctcgt ttgctgctcg gt 292

<210> 7178
 <211> 410
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-020-Q1-E1-F1
 <400> 7178

cacgcttttc taggactgcg ggcaggagtt tcctgcctct gccatgtaag tcggatgtcc 60
 tgtatgtgtc agatccatgc gagcatcttg atcaggggga agaaggcgac ataggtttct 120
 tccgaggcat ctttatgtca tttgccactt caagggtaaa gaagatgttg attgagaagc 180
 gggcgagggt tcatccaagg gagttgtgcc cttattgtaa ggccaagcta tggaacatgt 240
 ttcaggaaaa tatgatccca aggagtgtt cgcgaaggct gggcgcctat gatgactctg 300
 tggagtatgt tgtatgcctg aatggacatg ttattggact cggcacccta ctaccactct 360
 cagactcaga ggaggcagca gatgagtgat catcaggagc atgaatcagg 410

<210> 7179
 <211> 383
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-020-Q1-E1-F10
 <400> 7179

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 gcgccggcgc gcacaccaac tacagcacgg agtcgatgag gaaggagggc gggtagcagg 120
 tgatcaaggc ggccatcgag aagctgaagc tgcggcacag ggagcacatc gcggcctacg 180
 gcgagggcaa cgagcgccgg ctcaccggca ggcacgagac cgccgacatc aacacgttca 240
 gctggggcgt ggccaaccgc ggcgcgtcgg tgcgcgtggg ccgggagacg gagcagaacg 300
 gcaagggcta cttcgaggac cgccgcccgg cgtccaacat ggaaccctac gtggtcacct 360
 ccatgatcgc cgagaccacc atc 383

<210> 7180
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-F11

<400> 7180

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 atggcgagat cgccgtttgt tccgatggat caggggaaag agcaaggcgc cggacgagga 180
 gcggccggca ataataagga gcggcaggag gaggaggtgc tgctggtgca cagccagggtg 240
 cggcgggatca agaaggagga cgaggaggcc ttcaggaggc gcctcctgaa gctgcgcctg 300
 ctggagaccc ggcccaacac cggcgccggc ggcgtggcct ggcgagcccc gcgctccctg 360
 tcgccgctcc gccgtgccgg cagcgccatc atcccgggt 398

<210> 7181
 <211> 369
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-F12

<400> 7181

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 aacaccatcc acccaccagt tcgaagcggg ggcgaccggc aacctgcggc ggagatgtca 120
 ggcacgggca atggcggcaa ggggctcggg aaggggcggc cgaagcgtca ccggaagggtg 180
 ctgctcgaca acatccaggg gatcacgaag ccggcgattc ggaggctggc gaggaagggt 240
 ggcgtgaagc gcatctccgg gctgatctac gacgagatcc gcggcgtgct caagatcttt 300
 ctccagaatg tcatccgcga cgctgtgacc tacacggagc acgcccgtcg cataaccctc 360
 accgcctat 369

<210> 7182
 <211> 116
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-F4

<400> 7182

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cctcatccca gctgcggttg ccgccccctc ggatcgagaa gccccgcag gctccg 116

<210> 7183

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-F5

<400> 7183

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gtgcatgatg aattcattgc tgccatgaaa ccaaaatgcc atagcctaata agcttgcata 120
agttatTTTT tattattggt ttttgatttg cactgtcttg tccaggggct tcaccaagtt 180
cagccgtgcc gactacctga agtacaagag tgagggtaga attgttcctg atgggtgcaa 240
cgcaaaggta cagctatcac atatcttgct acatttagat atatctctga attagttttg 300
ggatagtaat gtaatttcca ttgatacgca tattttgaaa tggagctatt cttacaatgt 360
ttgctccgtc ttctcttcgg cagtatatta accagttcat aat 403

<210> 7184

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-E10

<400> 7184

agctaccagc gactcagcga gcgagagcag cacacactgc acgcagctag ctaggagcag 60
cagcagcggc ggcgatggcg gcctccatga tctcctcgtc agctctggcg gtggcgccctc 120
agggcctgcc gcccctcggc cgccgcgcct cctccttcgc cgtcgtctgc tccaagaaga 180
agatcaagac cgacaagccc tacgggattg ggggtggcct gaccgtcgac gtcgacgcca 240
acgggagaaa gggcaagggc aaggcggtgt accagttcgt cgacaagtac ggcggaacg 300
tcgacggata cagcccaatc tacaacgagg atgactggtc tcccaccggc gacgtctacg 360

tcggtggaac cactgggctt ctgatctggg ccg

393

<210> 7185

<211> 184

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-B7

<400> 7185

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ggaaaaaaaa tgtcagaggc cgccgtgctg gtgatcgccc tatggccgag cccgttcgtg 120

atccgcgtcc tgatccccct caagctgaag ggcgtcgagt tccagttcgt ggaggccgtc 180

cccg 184

<210> 7186

<211> 361

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-B9

<400> 7186

agccaacgcg ttcgaccaga cgcagatgga caagctgacg ctcatgctcg acccccagga 60

cgagttcgcc tggaccgacg aggcctgcca gatggctctc aacgagttcc aggacctcgt 120

cgatcactac gagggggctg agctgtcgga gtacacactt cggttgatcg ggtcagacct 180

tgagcactac atccgcaaac tgctgtacga cggggtgatc aagtacaaca tgagggtccag 240

agtcctcaat ttcagcatgg gcaagcctcg catcaagtcc aacagcaacc agataccaga 300

aaagatatag aatgtactta tccaacgccc ttaaaagaat ggtttctctc cattcgatta 360

a 361

<210> 7187

<211> 374

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-C1

<400> 7187

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 accaggtctc gccgccgcca ccgccgcggt agagagggga gggagagggg gaaaaaactg 120
 gcccagatcg agaggtacag cacgaaaaag agaggcaaga gagatagggg accggagggc 180
 ggccgggccg ggcccaagac cgagggggctc gtgcgcagga agctgatgag gctcctgtcg 240
 ctctctccct tcggctgccg tgctggaccc atcgacgacg cgccgccgcc cgtggaccac 300
 gccgccgccg cgaggaggcc ccggaagacg aaggccaaca gggccgcca gctgccgggg 360
 ggctgctgcg ggtg 374

<210> 7188
 <211> 388
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-020-Q1-E1-C11
 <400> 7188

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 ccggcagagt cccgagagcg gacgctgtac ttcttccatg gtctgggctt ggacgtgccc 120
 ctcccgggtct cggccgagcg gccgcacgcc tacacctcgc tcgtccgcgc catcgtctcc 180
 tccgccgcag tcacctctc gcgcgtctcc tgcacctca ccgtctctcc cgccgtcgcg 240
 aaccagtaca acacgctcca cggcggcgcg gtggcggccg tggctgaggc cgtcgggatg 300
 gcgtgcgcgc gcgccgcggc tggggacaag gagatgttcc tcggcgagct cagcaccgcg 360
 tacctcgctg ctgcgcgact caactctg 388

<210> 7189
 <211> 127
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-020-Q1-E1-C6
 <400> 7189

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 agtgggtccc tgcccaccac gtcccgccgc tgccaccgcc gcggtacaca gggcagggag 120
 aggggga 127

<210> 7190
 <211> 393
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-020-Q1-E1-C7

 <400> 7190

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 aagccatgaa atttactaac ttaccaagt aaataaacct gctttcctat gagtaccaac 180
 aatgggtttg tctgggtttt ttctttagt gtttgggtcta ttatttttgt tcacgcttca 240
 ggtagcttc actgttcatt ctgactgatt gtccaatata gggtttatct aacctcacat 300
 taaccgggtt tgccccaaaa taaaagaact tgggttcctga agatgcaatc aatgaaaata 360
 agcctggctc attccttctg gcaaatatcc tta 393

<210> 7191
 <211> 223
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-020-Q1-E1-D10

 <400> 7191

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 ggttcgattc gttgacctg aatgtgggtc atgtgtgtct cctgggaaat agcaaaagtt 120
 acacccccaa tgggaaacac gtgataaac aaaaactcgt ttttgactcc agggccatgg 180
 gggcgtctag ggcttctgtg ctcacaaaag ggggtccgggg ggt 223

<210> 7192
 <211> 378
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-020-Q1-E1-D11

 <400> 7192

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gggtacctgg cgcggcgggc ggcgcagaag gagcgggtgc gcctgctcta ccgcagggcg 120
ctcaaggaca cgctcaactg ggccgtccac cgccacctct tctaccagga cgcgtcggat 180
ctccgggaca agttcgaggc caaccgacac gtggataacc tggacgtggc cgataggctc 240
attgacgatg cggaggtcca gtacaggaac ttccagcacc ccgatcccta cattgttcca 300
tgggcaccag gcggcactaa attcacaaga aacccccctc cacctcaagg gatcgagatc 360
atctacaatt atggcaag 378

<210> 7193

<211> 315

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-D12

<400> 7193

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atcgaaagtt caccaatatg caaagcagtt cctttcatct gatagcaata gcggccaaca 120
aaaggagtag ctagctagtg tccttgcgaa gtgcaagcag cggagtgggc gttatttcct 180
gatcaaataa ttttgcctat ggacattctc gtggaaactt tgacggatct ttgcctgctt 240
ttctatgcga tgtaagctgc tgaaacctgc actcatcaaa tgttgtgtat gcagatggta 300
ccatgcattt gtttc 315

<210> 7194

<211> 337

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-D2

<400> 7194

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gagatgctct gagttctatt atgagatgtg tgggtagttc tagtgcacat tggtatgtcg 180
ccggtgtact tgctatgag tcgcccagga tcttttgttg gctgctttgt gtagcatgtt 240
gttgccggg cagtgggtgtt tgtttctttg gctggcaatg tctgtgtttc ggtctatctc 300

aatctcgggtt gtaagttggtt tggtgggtccc cttctgg

337

<210> 7195

<211> 301

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-D3

<400> 7195

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ctgtctcaga cctagagaat ccacaggagc tgtgtacaca atgtgatgat gccccacgtc 120

gggacaatga ttcaatcggt gaccgcaaga tctgctataa agggacacaa gaacatttga 180

aggatagtat gaatcactca tggcggtgaa agttttgagg acttactact ggtttgagga 240

tacccacatt cccgcgacaa gtcgtggcca ggcctagcct gagttatcta cacgacctga 300

a 301

<210> 7196

<211> 126

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-D4

<400> 7196

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ttcagaaaga cctcaggggc ttgcactttg tttatgttca ggctgtgtc aaatggcgct 120

gctggg 126

<210> 7197

<211> 226

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-D5

<400> 7197

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caccatgcgt cggcaccaat ggcttactac caggaggtgg actactgctc ggaggaggtg 120

aggtctgtgg ccccgccgg cttcgccgc cttggacgc gcgtccagcc tctgtcctc 180
tcggtcacgt tctggatgt ctctgcggtc tttcttcgg tgttct 226

<210> 7198
<211> 319
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-D6

<400> 7198

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tgtttcagag ctaaagaatc cactggcgcg gggtaaacaa tgtgggtgtg ctccaagtcg 120
ggacaatgat acactcttg tcgacaatag cggcaaaaca tggacaacag aacatttgaa 180
ggataaactg aaaagttatg gcgttgaaag ttttgacgac ttactactgg ttgaggatac 240
acacaatcct gggatgaatc gtggctatgc tttgcttgag ttttctactc gacctgacgc 300
aatggatcct tccaggaca 319

<210> 7199
<211> 333
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-D9

<400> 7199

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cgcatgcgcg gggttcgacg gccacttccg ttctacctcg aaaccgggta cgtggaggtg 120
gacgagcagc aagggtgtgca gctcttctac tacgtcgtgc gctcggagcg cgaccctac 180
gaggaccgcg tgetgctgtg gctgtccggc ggcccaggct gctccggcat ctccggcctt 240
gcctacgaga taggaccctt aaaatttgat gcccgagggc aagggtgaatt tcccattctt 300
ctctaccgac cggagacatg gaccaaggtg agc 333

<210> 7200
<211> 374
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-G8

<400> 7200

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ctaaccttga actccatttc catactgctt cattcttgta ccaaactggc cgtcaacacg 120
gcctcacctc ggttcatccg tttcaattac acaggatttg gctgatatcc atggactgat 180
tcaaatttta cccgggttgg cacatgttta tcgagacggt caacaacgga tgcagcccta 240
ggactgacgt cgggtcttac gctgaaatgt ccgcggaacc ccgatttggg aatcttccta 300
cgcatattca tataagtatc cccgcacgag agcatgggac tgaatgatgc gtcacaagtc 360
tagacggcgg taga 374

<210> 7201

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-H10

<400> 7201

gtgaaacaaa gtcgtcgagc gctctttccc tctctctata cctctctgtc tgcgacgcgg 60
ttggataggc taccgcccgc gccgccccta ggtgccgact gccgaggccc tcaccggcgg 120
cgaagagcgc ccgccagcaa tggcagcaag atgtagcctt tcctcgatcat ccttgtcggg 180
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gccaaagacca ggagccgctg ctctgagagc gcgtgctgcg aaacttcctc caggggttga 300
agcgcgccagg gtgcaaccga agctgagcga gcccttcttg gggttcaccc agaccgcgga 360
gatttgaac tccaaggcct gcatga 386

<210> 7202

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-H11

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accgccgccc tggcgctcat cgtgctggac ttcaaggacg cccgcccctg cctggagaag 180
gtgtcgtacc cgctgctgct cttcttctgc ggcattgtca tcaccgtgga cggcttcaac 240
aagacgggca tccccagcgc gttctgggac ttcattggagc cgtactcgcg gatcgacacg 300
cccacgggga ctgccgtgct cgcgctcgtc atcctctctgc tctccaacgt cgcgtccaac 360
gtgccgacgg tctgctgctg gggcgcgcg 390

<210> 7203

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-H12

<400> 7203

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caaaagaaaa aataatgggt ggtcctgcaa gatgtgccgt ccggtacaaa ggatgggctc 120
ccaacaacct tggcaatggt tcaacctccc cgggaaaagg ggcttaaaag gtccaagtcc 180
tccggtggc gatacagaaa gccaacaaat tgataagata aagtcaccag ttctatgcaa 240
cagagacaaa aattgttatg aacttctgca cagatatatg atattgtatc atcttcactc 300
gaagatgaca tgtttgatgc tctttgtcta tagtaataa atgatgtctc ttcaaaaaaa 360
aaaaaaaaa ataaaaa 377

<210> 7204

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-H4

<400> 7204

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ggactgaaaa ggcaaggcca ggcttgtctg ctacacacga tgcaaaatct tctaaggtta 180
atgcagcaga caaagaggac acgtcatcca caatttctga tcttggaact gtggctgtat 240

gggattcagg accaaagtgg gacgatgaac ctaaattggga taatcaacct aactgggaac 300
 ccgagacttc aattgagctc catagccctc gcgaggatat tgagcttggg ctgactaagg 360
 agctggtacc tagtttagat gaaaggtgga ctg 393

<210> 7205
 <211> 91
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-019-Q1-E1-H6
 <400> 7205

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<210> 7206
 <211> 402
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-019-Q1-E1-H8
 <400> 7206

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 aaaaaaaaaa aaacaaaaaa aaaaaagaaa caaaaaaaaa agataaaaga taaaaaaaaac 120
 aatgcaagaa aaacctagt tcaaaattcc cggggggcgg ccctaaagtt tcaggccttc 180
 gttccccgtc ttggaaatct ggacccccctc aaaatgtgcc cccaaaatca attttggggg 240
 cgggtgcttta aaacctcgtg gcgggaaaac ccctgggggtt aaccagctta acccccctag 300
 aaaaaacccc cttttcacca gcaggggtaa atcccaaggg gcccgcacat tatgcccttc 360
 ccaaaagggtg gccacccta aggggacagg ggaaccccc at 402

<210> 7207
 <211> 375
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-019-Q1-E1-H9
 <400> 7207

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 cagtgggttaa gcttagacaa tccgaagaga aggttatcag cctgagcaaa gagaaggagc 180
 agttgatgaa ggaaagagat gctgcatttc aggaggctca tatgtggcgc attgaactag 240
 taaaagccag ggagcaagca gtgatacagg aagcaactat tgcccagca gaggagaagg 300
 ctagagtttc tgaagcagat gccgcagctc ggatcaagga agctgctgaa aagttgcata 360
 ctgttgagaa agaaa 375

<210> 7208
 <211> 368
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-020-Q1-E1-A10
 <400> 7208

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 gtgagctgcg gccagcgggt gaagtgaagt ggaccggacg tggacgaagg agagaggag 180
 agagagagag agagaagaaa gggcgccgcg gggggccatg ctggacacgc gccggcgagg 240
 gacaagacca ccaccggctt cgccgctacg tgcagcctgc tgagccagtt tctcaaggag 300
 aagaagggcg gcctgcaggg cctcggcggc ctgcgccatg cgccggcgcc ggcagctgga 360
 gcaggggc 368

<210> 7209
 <211> 353
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-020-Q1-E1-A12
 <400> 7209

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 tgtatacact ataactagct ttgcacgtta ttgattaata acacacacat attaaactaa 180

ttctatttag ctcaatgcct tcacatgccc attcctcaag ttcgcatctt ttaaaggaag 240
 caacgcatgt tttaatatct tgaatcaatc tgggcgaatg tgctgaactc ctaaccaata 300
 tgcataatcc aaacctttat taactttgcg atccactcgc cgataaaatc tga 353

<210> 7210
 <211> 150
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-020-Q1-E1-A3
 <400> 7210

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 ctctatagga gtggcaggaa gctgatttta 150

<210> 7211
 <211> 287
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-020-Q1-E1-A4
 <400> 7211

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 aactgccatg gcgggcaggc tcctcgcgaa tctaactgtc atgggcggaa ccgtgggttg 180
 cagggccatg ctccaggcct accgccaggc catcgtcaat gcaaacaaaa ctggagctgc 240
 ccaagaagct ataaatggta ttagacgggc taccagggca tgactga 287

<210> 7212
 <211> 156
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-020-Q1-E1-A6
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cgagtgtctc tcttgcgagt ggggtacggt ctaggtctag tctgtaggac tggcacgcag 120
ctcagtttat cgtccattcg ttgtttccct tccctt 156

<210> 7213
<211> 409
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-G5

<400> 7213

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ccccaagaga tcccaaacc ctacacctgc ccgccggcgc actcggggac cgtcgaatcg 120
agcaggttga cggaggagag ggagcctcga agatgttccg gaaccagtac gacaccgacg 180
tgacgacatg gagccccag ggcggctgt tccaggtgga gtacgccatg gaggccgtca 240
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acaagcccgc ctccgagctc tctcctacc agcgggaaggt gttccgcgctc gctgaccacg 360
ccggggctgc tctcgccggc ctcaccgccg acggccgcgt tctcccgcg 409

<210> 7214
<211> 373
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-A9

<400> 7214

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gctgcggggc gcaggacgcc ggccccgccg ccgcgcctcc gccggacctg ctccgcacct 120
cctccctgcc cgcggagtac atggaggacc ggctccgccg ccgcgcgatg cagagccagc 180
ggcgctcga ggccaagcgc aagcgctcgc agcgccgcaa ctccatgagc tcgggaaggc 240
cggttccggc ggccgggtggc cgcgacgacg gcctcgagca caccgtgccc agcggcttcc 300
agctccgccg ttcggtcgcc ttgacgacgg cggggtcgcc gacgccagc cggccgcagc 360
aagggccgc gga 373

<210> 7215
 <211> 107
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-020-Q1-E1-B10

 <400> 7215

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 aaaaaataaa aaagaaaaaa aaaaagcaag gaaaaatagt caacaac 107

<210> 7216
 <211> 462
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-019-Q1-E1-F1

 <400> 7216

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 tgaacggcag cgacgccgtc atggagccgg ttgttgctgg cagcaacacg gtagtagctg 120
 ttgcccaggt tgagttgcaa acaatgaacg tgcagcagcc cgctgatgtt gccggaccca 180
 gcgaggggggt ggcggcgatc tccaaagggg ggaaggtagg gccgaaccgg tgcagcgcct 240
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 tccaccgcta ctccgacaag cacgactgca agttcgacta ccggactggc ggcaaggaac 360
 cccattgcca ggctaatccg gtggtgaagg cagacaagct cgacaagatc taaggggggt 420
 tccctacggt tgggtatcag gaagattgta aaccgcggta ac 462

<210> 7217
 <211> 136
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-019-Q1-E1-F10

 <400> 7217

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 tgagaacacc tgggttcagc ggagcagact tggcaaacct tctgaatgaa ccaccattct 120
 ggtgggaaaa cgggaa 136

<210> 7218
<211> 334
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-F2

<400> 7218

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ggatggagag tcaggagac cccgcgccgc gtcttcgacg ccgtgctctt cagcaacgag 180
ctcgacatcc ttgacatccg ctggcacgag ctgagcccct acgtgtcgga gttcgtgctg 240
ctggagtcca actcgacctt caccggcata aggaaggacc tccacttcag ggagaaccgg 300
cagcggttcg gcttcgccga gtcgcggctg acct 334

<210> 7219
<211> 221
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-019-Q1-E1-F3

<400> 7219

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gccaaggag ccggcggcgg tgctgcgcc ggccgaggag gaaggcagca agtcgtcgga 120
ggggttcggc ctgcggcagc tcatgaaggc cgccgagcag ctggtgggag ggaataagca 180
nggcngccgg gaagagagcg ccggcggcgg tgggctgttt a 221

<210> 7220
<211> 441
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-F5

<400> 7220

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gtgggagaca tcacaccagc tttgaagtat tgcccgctctc cattgtgaac actctgcagc 120
 atatgtagca gataaatgag tgaaactatt tgtactgcct gctctgcaaa ttagtatgaa 180
 caccctcaa aaagatttgg cccacactct ggtctctctg tttgcagctg ggaacaggga 240
 gctccagagc ttgtgaattc tatagaataa aggtggttgt ccgcacagta tagcaaactg 300
 cgaagcctgc aactactaga gtttggctctg tagcaggctc agttgggaat gtgtagcaga 360
 gcatgatcca tgggtgtggat gaattgcaga gtactgtgct gtgtgtgtag gaaggaaaag 420
 ctgccgcctg ccgattgtgc a 441

<210> 7221

<211> 443

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-F6

<400> 7221

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 gaatgcacac actctctttg cgatcacaac ggccttggca attctcccaa cactggcggt 180
 gtgatggcga caattgcagt catcgtcttc ctattctggg ttggctcctg ttctgcttca 240
 cgggtggtgac ggttgcctat gctggaatcg ccgtctcagg gtttctgatg tttggcgagt 300
 ccaccatgtc acagttcact ctgaacttgc cacagcagta catcccatcg aaaattgcc 360
 tctggatgac ggtattctgc agctgcattc agaatgaaga agatatgtc atttcattac 420
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<210> 7222

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-F7

<400> 7222

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ggcggcctcg cctgggccac ggacgaccac tccctccaca acgccttcag cacctacggc 180
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gatggcggcg gcggctacgg cg 442

<210> 7223
<211> 299
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-019-Q1-E1-F8

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ctgctcccat tagaaatata atagcgtatg ttatgttgat gcatatatat atgcatcgct 180
catctacctc tgtggtgcaa aattctgaat aaaatctggc ttttttggtg aaaaacaaaa 240
aaaaaaagaa aagaacaaaa aaaagaaaaa aaaatcacia gaaaaaaaaa aaaaaggca 299

<210> 7224
<211> 414
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-019-Q1-E1-G1

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tgccagtaaa aaaattcaaa atgaatcaat gaacttaaatt ccccggtta attaccttta 180
aattcttaca ccaacaattg ctccaaaacg gtggttacat cgggctgtga gtaatcaaca 240
cccttttttg ttgaatgtta tcacaacaca tggggacgtg gtataaagtg aagaaagaat 300
gaggggtcca ttccttttat tccgtaagga actcagaagc ttcgagcat actagttcaa 360

gttgggaatt ttactctgta gatgtagata aacaattcag attcatgggg tgta 414

<210> 7225

<211> 204

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-G10

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atgatttgca acgtaaaaat aaaccaccga gagcttctgt acgacaacgc agacaatgaa 120

ataatgcaca tagccaacat caatagaaaa agacaaatta aagttaaaag aggacatggt 180

gtctgtagcc gcatcataca tcta 204

<210> 7226

<211> 315

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-G12

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taatgcaaat gctattagaa tcgaacatta ctaattcctg tgcattgattc agatcgattt 180

tgtcaaatag gatttgatgt attaacatgg tatgtttctt ttaaaaagaa tccttgctac 240

catcatttgt tacttacagg agctagtgcc cagatttgtg ctgaacacta ttaacaaact 300

gatctgtgca atttc 315

<210> 7227

<211> 452

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-G4

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atccccacca ttggattcaa tgttgaaact gttgagtaca agaacattag ctttcacgtt 420
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<211> 445

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-019-Q1-E1-D4

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tcacagcctt gcgactcatt tggttttggt tcccagacct agcagatctt ttacaaatcg 360
tggaagcatg catactgaag gaataactga aactaaaaat aaacaacaca ggttttcatt 420
atctagcttt gtanatggat aatgt 445

<210> 7229

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-D5

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tatgccattc tacgtcccaa gccgcttgac tatgaccagc gcaacacctt ggttgatgtc 180
 ttcaggaaga tggatgaatca aagatttggt agcaacagtg ggtctccggt tgtggaacca 240
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 tttagtgtca atacttatga gcaatatact cgcaagcaaa tgatctctat tatcaagaaa 360
 ttttccaagg ttctattttc ttatcagagg agtggaaattt tctgtggggt tttacctatt 420
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<210> 7230

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-D6

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<210> 7231

<211> 441

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-D7

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ctaaaaggtt gctcgatgat atggctgcaa aaggtgttaa gtatgtagat tgctatggag 240
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 gtgtatctgc tgctgctaag gttgtcagga aggcataatcc acaagagaaa gttggagtat 360
 ttgttcagcg tggaaagggg tggaccctct ctgtagttga atacagtga atggatgcag 420
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<210> 7232

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-D8

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 tagccaaggg cttcatggac aagctcgtcg tccacctctc caagaacttc atgcacctgc 240
 caaacatcaa ggttccccctc atcctgggtt acctgggaag gcaaaggcca gggaaaatcg 300
 ttcaaatgcg agctgggtctt cgccaagatg ggcatacccc ccatcatgat gagcgccggc 360
 aatctggaaa gcggaacgc cggaagccc gccaaagctca tcaggc 406

<210> 7233

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-D9

<400> 7233

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 agctttaaca tcattcctag cagcaccggt gctgccaaagg ctgttggtta agttcttctt 120
 gatctgaatg gcaagctcac tggatgtcc ttccgtgttc ctactgtgga tgtctcggtt 180
 gttgacctca ccgtcagaat cgagaagggg gcctcctatg aggatatcaa gaaagctatt 240
 aaggctgctt ccgaggggtcc actcaagggt atcatgggtt atgaggagga ggatctgggt 300

tctaccgact tccttggtga cagcaggteg agcatcttcg acgccaaggc cgggatcgct 360
 ctgaacgacc acttcgtcaa gctcgtctcg tggtagac 399

<210> 7234
 <211> 353
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-019-Q1-E1-E10
 <400> 7234

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 atcagctctc ggctgaccac tcatcgccag tgggtgcctg ccgaccaggt ctgcccgcg 120
 ccaccgcccgc ggtagagagg ggaggagag ggggaaaaaa ctggcccaga tcgagaggta 180
 cagcacgaaa aagagaggca agagagatag gggaccggag ggcggcgggc cggggcccaa 240
 gaccgagggg ctgctgcgca ggaagctgat gaggctcctg tcgctcgtcc ctttcggctg 300
 ccgtgctgga cccatcgacg acgcgccgcc gcccgtaggac cacgccgcg ccg 353

<210> 7235
 <211> 383
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-019-Q1-E1-E11
 <400> 7235

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 gtttcctcca cgcgcagcgc aaaaaggag tccgtggctg acaacgccg gatgttgga 120
 ggcggcatca aggacgtgcc ggcgaacgag aacgacctcc agtccagga gctcgcgcg 180
 ttgcgcgtca atgagcaca caaaaggcc aatgctcttc tggggttcga gaagcttgtg 240
 aaggccaaga cacaagttgt tgctggcacg atgtactatc tcactattga agtgaaggat 300
 ggcgtagtca agaagcttta tgaagctaag gtctgggaga agccatggga gaacttcaag 360
 cagctgcagg aattcaagcc tgt 383

<210> 7236
 <211> 84

<212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-E12

<400> 7236

tcaaaggcgg ctcccaaatt ttcaacgaag gcgggctgga ctaactccgg aaaccaacc 60

tgattctagc ccaaaacaac ctcg 84

<210> 7237
 <211> 400
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-E5

<400> 7237

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tgctcgccgt atgtacaagc cgagtgtaat aatacagtac tatgtgtatt attaaatctc 120

atgctttgaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagggggg gccccccaaa aggtttcaac 300

cttaattacc cgtgaaagga aatttaaaac cctccaaaag ggccccccaaa attaaattca 360

aggggctttt ttttaaaaac tcgtaacggg aaaaacccgg 400

<210> 7238
 <211> 430
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-019-Q1-E1-E6

<400> 7238

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tatttgagaga aagtgaagca cgcgataaga tgagaaaaag gaagagagaa gaacagaagg 120

gaggactcga aaatgggata cataggctcc gtgccgaggc cgagaggctg gacgtgttgc 180

tcgcggaggg ccgtgttttc tctgacctgc ctgctttggc cgatagagat agcatcttgc 240

tgaaggatac cgcctggag aattctcttg tctgccagcc ccaacaacgg aacttgcattg 300
 gtcgaatttt cgggtggttc ctgnatgcac gagcatttga gcttgccttc tcgactgcgt 360
 atgcttttgt tgggcagaga ccttggttcc ttgaagtcga tcatgttgac ttcttgaaac 420
 cagtggacgt 430

<210> 7239
 <211> 93
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-019-Q1-E1-E8
 <400> 7239

acgacgcgtc cgaggacata cacggtctga gataacgcac tatacaagga gtcctacattg 60
 gagatgcact acataggcgt cacgatgggg ttt 93

<210> 7240
 <211> 103
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-019-Q1-E1-B8
 <400> 7240

acaaaaagaa aaacaaaaaa aaaaaaaaca taacaaaacc atccacacca caacgatcac 60
 ctccgcagca ccgaatccat atacagtcac aacacgtcgc ttt 103

<210> 7241
 <211> 409
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-019-Q1-E1-B9
 <400> 7241

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 ctttactttc cagagtgtaa cctgccggac ttctgataga atgaactgaa agacttctct 120
 aacaaaagtg gagctgaggg gagcaagagt gctgaaagtg gtccaatggt tttagatggt 180
 ctcgaatggt atctgaaata tgagggttat ctcttgcttg atcaacaata gaagcaaaaa 240

atcatccttt tgtttattta tgtttcccaa tataaaggaa aaggggaaat attttgggtgc 300
atttgccca aatcttttgt ctctagaaaa ctatgtagtc acctatagca ggcgctatag 360
tcagtttttag ctattttaga caccactact atttgtacac acatttcta 409

<210> 7242

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-C1

<400> 7242

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aaacatgggt taggtcaagg aagaaaagggt ggggatgagg agtatgctgc agatgaagat 120
ggccctgaca caactgatca tccacgagac tttggaacag atgttaccgc ccaaattctca 180
gaaacacatt tcgatcacca ggccgaagat ggcacccatg acaagggtgg aatgaggcag 240
caggggagag ggagaggccg tggaggtaga ggcagaggcc gtggtcagca ttatggccac 300
aacagccgag atggccacca tcctattggc actccccgt cgagcatcc agctgtgccg 360
aagccgcccc gggccccgca tgccgatgg caaaaagggt ttcaacatgg gccgaggaa 420
gccgctca 428

<210> 7243

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-C11

<400> 7243

aggtagacaca taagggtgta ccacataccc tggctatacc gatgataaga cagtgcccaa 60
ggatactgtg actccaacgt ttgctgctgc cgcgcttttt cataaataat gccagatggg 120
atggagttcc ctttcatatg aaagctggga aagctttgca cacactcacg agctgagatt 180
acggtacagt tccgacatgt tcctgtaaatt ctctacaagg ggagttttgg cacacatctt 240
gatacgggtca ctaatgagct tgtgagacgt gtgcagtcgg atcaatcaat ttacctatag 300
attaacacct atattcctgg tcccggtatg ctactagata cgagtaactt gagtcgccaat 360

tatgccgcaa ggtactcaaa ggagata

387

<210> 7244

<211> 392

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-C12

<400> 7244

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ccctccagga ggctgctgag gcataccttg ttggcctggt tgaggacacc aacctgtgcg 120

ccatccatgc taagcgtgtg accatcatgc caaaggacat tcagctggca aggaggatcc 180

gcggcgagag ggcctaatcg ccacctcaaa catcgtgaca aaaacatgaa gtcctgggggt 240

tattgttaat ctggtgccat tgtaaggaca tatgactacg gtttggtttg tggatcgcaa 300

gtttctcttc tgccactggt gctgctacct ttgctgggtg tattgctagg gtcgaatact 360

taagttaact atgcgctgac agtctggact ag 392

<210> 7245

<211> 254

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-C4

<400> 7245

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tacgccgacc ctgatggcat tcttgtctcc aggacggaac tcaccgtgta gacagacacc 120

tggttgtatg tgtgtgtgtg tataaggaat cgggcgctct tgctgttaag cccgactgcc 180

cgagcttgca ataatggatt cttgcttgat cacacattta tacttagaat aatcgaatgc 240

ttgcttccat gggt 254

<210> 7246

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-C6

<400> 7246

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ggaattgttg ggagacttgt ttttggtgat ggagactaca ttgaaggaat gttcaaagaa 120
aaaatctgtc agtgtcgttg atgaatgttt gaaacttgtt ttcctcttcc acacactagc 180
acaatcaaag aaataccgac aagatgctac aactcttctg ctggaggcct tgctgatggc 240
tttctctctg tccagtata ctgtttcaca ggagcttgct gaagtgaaca ccattttcag 300
aaagtgttc tctcaattta ttcagatacc gtctgtggc atacagatta aagacataat 360
gctttctgca ccagctgaaa tgagactaca gcttcaggac atgggccgag cttcagtcag 420
tcaagggcag ata 433

<210> 7247

<211> 442

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-019-Q1-E1-C8

<400> 7247

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gcggccgacg tccacctcgg caccaagaac tgcgatttcc agatggagcg gtatgtcttt 120
aagcgtcgca ccgacggcat ctacatcatc aacctgggca agacatggga taagctccag 180
ctcgcggcga gggttattgt tgccattgag aaccacaag acatcatcgt ccagtcggcc 240
cgcccctacg gccagcgtgc tgcctcaag ttcgcgcagt aactggcgc ccatgccatc 300
gctgggagggc acaccctgg tacctcacc aatcagctcc agacctcttt cagcgagcct 360
cgctgctca tcttactga cccaaggact gaccatcagc caatcaagga gtctgctctg 420
gggaacantc ccgacattgc ct 442

<210> 7248

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-C9

<400> 7248

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cgacgttaag tacggcataa atcttgtcaa tgaaagcagc ggacagtggg aacatttgtc 120
taacaaaaat ggctacatca tagcgcttag ttgcaaaaag attctcaaaa ttttaagcact 180
ggtattttcc aaaacaggag tcgacagggt attcaaagt caggaatcca aagttctttg 240
agacattgct tgtgatggat taggcaagaa tttaatagct acatcattcc aatttctaac 300
aaaccagcat ctgttgatgc agtgaaatct cagaagcaaa catatgacag tatcgtgcct 360
ggaaaattgt tacagaatgg ctaaaaataa gccagttaac ag 402

<210> 7249
<211> 438
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-019-Q1-E1-D1
<400> 7249

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gccgccccg ccgccctgca ctccgtgagg agagccgacc gctgccctgc gacaatacac 120
ctgggcaagt tccatgacca cgggctcagg tccggccgtt ctaagagatc cggttcagcg 180
aaggtgggcg ccttcccgtc gctggacgtg gtgccgtga tggtgacgat ggtggagcac 240
gtggacatgt cgcgggacta cgtcgtgacc aagtccatct ggcatctcag cgacgcagcc 300
ctcaagagcg tctatacctt ctacgccatg ttcaccgtct ggggagtctg cttcttcgcg 360
tccatgaagg atcccttcta cgacagcgag acgtacagga gccagggtgg cgacgggacc 420
gtgcactggg actacgac 438

<210> 7250
<211> 334
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-019-Q1-E1-A3
<400> 7250

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atcgtcgtcc ttctcgttcc cctcgtgtgt agcctttggt acgttggtgg aagggcgagg 120

cacacacgag aattgataga ggggggatcc ccattttcag ctcttcgtgt ttttttgtag 180
gaggaattcc cgttcacatg atccgtgcct ggacctgacg gttttgcccc gctctgctgc 240
ttccctttcg gggagaagag gactcgactc aaatcatttg gtatcgcaga cctcgccett 300
cccagttcag ttgacagaga ttccggcat gtcc 334

<210> 7251

<211> 378

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-019-Q1-E1-A4

<400> 7251

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ttgcgaaacc ggtgtcacct gctctgccga ggcacaggaa gcggtgctcct acacgtgctg 120
ctagggggcag aaaggggtgct gctgggagag gagtgcctcc cgcaccaaag cctagaagaa 180
aggggggttga tattgtcgtc ttagaagctg atcctgcttg tgaaacccca cttaaagctt 240
tcaagggact ggaagttgct gctgctgcgc ccaagaaacc ttctttgaag cacgtanccg 300
aagttggtgt tccgaaaatg aatggtgaaa gtggggagaa gattggtggg gctgaagatg 360
aatcgacagc tacacctg 378

<210> 7252

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-A6

<400> 7252

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gtacctcatc aaggatccta gcgccgagga ggtcgtagcc gccggcgaca gcgcctgcac 120
gattccggtc atcgatttcc gcaagctgct cgatccgggg tcgtccgagg aggagtgcgc 180
caggctggga gccgcgtgcc accactgggg attcttcag ctcacaaacc atggcggttc 240
ggccgaggtg actgggaacc tgatgaagga cgtagctggg ttcttcaggc agccgctgga 300

agccaagaag gagtgcgcgc agcaggccgg cagcatcgaa ggctacggcc aggccttcgt 360
 cgtgtcggag gaccagaagc tggactgggc ggacatgctc ttcctcatcg tgcggccgag 420
 ggaggccagg gacatgcgct tctgg 445

<210> 7253
 <211> 431
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-019-Q1-E1-A7
 <400> 7253

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 ctccggctgc gtcgccggcg agcccgacac cggaatcgg atccgccgac aaggcgagag 120
 ggaagagatg gggctcacgt tcaccaagct gttcagccgg ctgttcgcca agaaggagat 180
 gcggatcctg atggtgggac tcgacgccgc cggaaagacc accatcctct acaagctgaa 240
 gtcgggcgag atcgtcacca ccatccccac catcggattc aatgttgaaa ctgtggagta 300
 caagaacatc agcttcactg tctgggatgt cggggggccag gacaagatca ggccactgtg 360
 gaggcattac ttccagaaca cccaggggtct catctttgtt gtggacaaca atgatacgga 420
 ccgtgttggtt g 431

<210> 7254
 <211> 410
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-019-Q1-E1-A9
 <400> 7254

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 gtttcatgta agttacagag gtggaaaact aaacagctcc ttatcccagg cgctgaccaa 180
 ttgcctgcgt tattacctcc gaaggcctga gacagatgaa gacagctatt gattgttgtg 240
 tttgtcgaac cttcctatag tgcattagaa tcagaaactt tggcttcagt tccttcgcta 300
 tggggcccctt gtactgctgc aaatggagtt ttccattgta gctgataaag tgcccacaag 360

gtgcatccat atgtgcatag gtggcactga atcggggctc actggaccag 410

<210> 7255

<211> 424

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-019-Q1-E1-B1

<400> 7255

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ccgctgctgt gttggccacc accaccgact ggggcaagag agaaggagag aaggaagatg 120

ccgtggtgac cggcggtagc gatcttcttc acgcgcgagg tattgggatg gatgcactcg 180

gttcgttggg cgacggcgag cttcgatgct tgcgttgggc gtcgggggga cggagaagga 240

cctcgtggcc accacaattt ctcacccatg ccgctgctcc gccgcggaac cactagcgcc 300

gtggtcggag aatatcagca tcctcaccat tgcgtaaggt cacnagtcac ctgatgagca 360

agttggtacc tggaatctca agtgccaggc aagttgtgcc cttgatcact tcttttacc 420

agtc 424

<210> 7256

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-B10

<400> 7256

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agagttagta accgctctga cccaagagca tccggtgggtg ctgatgttct gggcggactg 120

gaaccagcca agcaaggcca cgtactggga tctggccatc gctaaaaagg atgaggccgt 180

attctgccag ctggactttg ataagtttaa agatgtcgta gagaagttca gagtgaaggc 240

tctgccgacg ttcctcctga tcaaggaggg cgaggagcag cgcagggtcg tcggtgccaa 300

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acattctaac ttcatcaaat t 381

<210> 7257
 <211> 337
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-B11

<400> 7257

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 agcgtttgct ctctatgggc taattgttgg aattatcctt tcgtctcgcg ctgggtcaatc 120
 ccgggcggat taagtgcacc accattctgt gattaccgca tcgtttatta tgctattctg 180
 agaggattgg aactctattc ccttgtctag tttattcttg ttaccatgta ttaatgtaac 240
 aatctgtagc tgatggaagg tgacttccag tcatgttttg gttttgggtg tgctgagcag 300
 aggttattta tttttgggtt taaggcggat ggatgct 337

<210> 7258
 <211> 431
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-B2

<400> 7258

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 ccacatgccg ctgctgtgat ggcgtccacc accgactggg gcacgagaga aagacagaga 120
 gaagatgccg tgggtaccgg cggtagcgat cgtcctcacg cccgaggtat tgggatggat 180
 gcaactcggtt cgttgggtcca cggagagctt cgacgcctgc gttgtcgtcg gggggaccga 240
 gaacgacctc gtggccacca gaattttctca cccatgccgc tgctccgccg cggaaccact 300
 atcgccgtgg tcggagaaga tcagcaacct caccattgcg taaggtcacc agtcacctga 360
 tgagcaagtt ggtacctgca atctcaagt ccaggcaagt tgtgcccttg atcacttctt 420
 ttaccagtc a 431

<210> 7259
 <211> 465
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-B4

<400> 7259

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gaagtatgat gatgctctgg cacatatgat ctttgcagca tcagacatgt tcattgttcc 180
ttctatgttt gaaccatgtg gcctcactca gatggatatct atgcgatatg gttctgtgcc 240
agttgttcgg agaaccggcg gtttgaatga cagtgtcttc gatttggacg atgaaacgat 300
acccatggag gtgcgaaatg gcttcacctt tttgaaggct gatgagcagg attttggttaa 360
tgactggaa agagctttca actactacca cagaaaacct gaagtttggg aacagttggg 420
gcagaaagac atgaagatag atttcagctg ggatacttca gtttc 465

<210> 7260

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-A12

<400> 7260

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gtttcatcaa gtttcttaaa gtacagcaga gcttccattt cctacatgac cagatagccc 120
tagcaaagca atggaagtcc tacaccaaaa gccatccatg tttecccacg tactatccaa 180
gcggccagct cgggaacagc aatatatatg caaagtgcaa gcaggtgaac aagcgcagct 240
agtagtaccg gaggtccttg cgtcgaacac gaggtccccg ttgatgagct cgcggtaggc 300
ggcgacgggc cagatgaacc ccctggggag gaggcgggtg gcgagctcga cgtcgatgat 360
gatctccctc atggcgggct tcttctcgcc gctg 394

<210> 7261

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-B6

<400> 7261

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cgcgccaccg atacctgtac ggccacaacg cgtcgctttc ccctccctcc gccgccgtga 120
tctcctcctc ctgccggcgg cgctgaccct cccgacggcg cccgccccgt tgctgcctc 180
ggcgcgaggg ctgttccgca tgcccccgcc gcggctggtg aaccgttact ttctggtgcg 240
cgcgggcgag tccgtgtaag aggggcaggg cctcctccgc accaaccggg tcgccaagac 300
ctccgtcgac agcggcctct cccccgtggg gctccgccag acggcgcgcg ccgcgctcga 360
gctccagcgc ctcgggcctt gcgaggacga ctgctggata tggccgtcca tcaactcagag 420
agcttaccag gcggccgaga 440

<210> 7262

<211> 368

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-G4

<400> 7262

cgggcccggt caaccacac gtccgggagt gaaggaccga ggagggaaac agagaagatg 60
gcgacgaagc gcgacaccga gtcggacggc aaaggctcaa accccttcgg tgggtggcgca 120
actccccgc cctaaccgcc gccctgtca tatgcctcct ccgctccgcc ggggacttcg 180
gtggcggcgc cttcgttggg tccatcttcg gatatggaca aggcttgatc accaagaagg 240
gttttaaggg ctcatcagc aatgcagggt cctctgccaa gtagactttt gcaattctct 300
ctggcgttca gagtttggtt ttgtgcttgt tgccaatgct acgtggcaag gatgacattg 360
tcaatgct 368

<210> 7263

<211> 255

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-G5

<400> 7263

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gatgaggcgc ctcgatgagc tagctggcca ttgaggagtt attgcttcog aagctgctct 120
cgcagctcac aacagcagcg cgacacttgt cgatgttctc aactgatag aggacttagg 180

ctgacgcaca gatgatttaa cactattagt tcacgcaca cggatgaacc taatgataag 240
tatttcaaga ggagt 255

<210> 7264
<211> 414
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-G8

<400> 7264

gggccgaggg tcgacccaag cgtcagccca cgcgtccgcg gacgcgtggg cggccgcgtg 60
ggggctgcca gcgcttcatt cgagatgttc gcagtaccaa agtagacagt gccgttcgtg 120
atgctcgtat acacgaagac gatcccttgc gcggtattgt ctaactgcct ctggaaagag 180
tatttcacaa gcgcagccag atcaaccaga tgtttccctt tgctggaagt gtacgatatg 240
gccgcataag aatctccatg gtcttccgaa gtgtgcatgt acaactacca agagatatgc 300
tgggctggga ctacgggact gtggatatca aaccctctgt aaaggctatt gacgtgccgg 360
aggacctaaa gccccttcga ctcaaggctc gcacgccatt ggaacgcgca aagc 414

<210> 7265
<211> 385
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-G9

<400> 7265

accacgcgt ccgcccacgc gtccggcgga atcaactacc agcctcccag cgtcgtcccc 60
ggcggtgacc tggccaaggt gcagcgtgcc gtgtgcatga tctccaactc caccagtgtt 120
gtggaggtct tctcccgcgt tgaccacaag ttcgacctca tgtacgcaa gcgcgccttc 180
gtgcactggt acgtcgggtga gggatatggag gagggcgagt tctccgaggc tcgtgaggat 240
ctggctgcgc tcgagaagga ctacgaggag gtcggtgctg agtttgacga gggtagggac 300
ggcgacgagg gtgacgagta ctacacgctc tactggcgcg gcgtcgtcgg gcctgtgtgc 360
cactgctatc ctgtgatctg ccctg 385

<210> 7266
<211> 344
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-H1

<400> 7266

cccacgcgtc cgccttcgc ggactagttt tttctgaaga ttccggcgatg gcggcgacga 60
tcgaatccgt gaaggcgcg cagatctttg acagccggcg caaccctaca gtcgaggtcg 120
acgtgttttg ctcagatgga acctgtgcaa gggcagctgt tccattgga gcatcaactg 180
gtgtatatga agctctggag ttgagggatg gtggctctga ctacttggg aagggtgtct 240
ccaaggctgt gaacaatgtg aaatctgtta ttggacctgc actgattggc taggacccta 300
cagcacagac tgagattgat aacttcatgg ctcagcaact tgat 344

<210> 7267
<211> 420
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-018-Q1-E1-H10

<400> 7267

tcccgggacg cgtccaattt gactgctaca gatgcaagaa atttgoggaa cactattggg 60
ccctggaact gtgaactttg tgaagatcaa gacatttcat cagaagctgc aaccgttagc 120
gataaatcac attgtaatgg caagaaatta ccctttgcac agtgtggcat gtgccatggc 180
acatcaggtg catttagaaa gactgtagat ggggaagtggg ttcattgctt ctgtgctgag 240
tggttggttg acaccaagta tgtaagggga caagataaac ctgtanaagg aacggaaagc 300
ctttagagag gaaaggacac ttgttggtgc tgcctccaca atgttggcgt gtgcttaagg 360
tgtagcagtg gggattgcaa cattacattt catcctaatt gcgccaaaaa tttgtggttt 420

<210> 7268
<211> 387
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-H2

<400> 7268

gccgacctaa ggtccgaaaa ctgttctctg acaatgaccc tggactattc acggagagtc 60
tgcggaaata cgaggaagag aaagcgagag agaaggaggt taagtcgaag caagaggcca 120
catggagacg ccttgaagag atggcatcag cgaaagcgac aagcggcgcg gcagttctcg 180
tctctcgacc cttatccccg cagtcttcgg ctgtgtagcg aattttcatg tggtggtcgt 240
gagaacattg tacaggattg agttgtatat acgaggtata ttaagggtggg caaattgaca 300
aatgatatcg tcggagaagc cagccagatg ggttacaggg ctaggcacac atcattttct 360
tgggtcccgaa tctgggcttc tgctaag 387

<210> 7269

<211> 356

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-H3

<400> 7269

ggccagtctc cagcagacga tctcagcgaa catgaggccg ggatcatgga ctacagcatg 60
ggtagccagg aagccaactg tggaagcagc ttcttgccg agtctgttgc taagatgcac 120
ttctcgaccg ccgaagcttc ctgagaggcg tgcctcagtt ctgtaaatat gatggacggg 180
atgtgtataa ataaaccag catgctgttt tttttcgtcg tcgttggtg cgtttgagag 240
ctcgccatgt gttttggaac aataattttt ggacagacta tgtgttctgt atgttttgg 300
cgtcagacat atctatcctc agtccatggc tttgcttaac ggtttaacct ggactc 356

<210> 7270

<211> 362

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-H4

<400> 7270

acgcgtccgg gggaatgttg gtgaggaaag gagattgttg gaggaagggt tgaagctatt 60
ccctgcattc ttcaaattgt ggttaatgca tggacagatg gaagaccggc ttggtaatgg 120
agcgaaggcc aaggagggtt ttgagaatgg cctgaagcag tgccctagtt gcatccctct 180

ttggctctct ctagctaccc tagaggagaa gattagtggc ttgagtaaata cacgtgctgt 240
tctcacaatg gctagaaaga agaaccctgc tacacctgaa ctctggctag cggcaattcg 300
agctgaattg aggaatggga acaaaaagga agccgatgct ctactggcca aggcattgca 360
ag 362

<210> 7271
<211> 386
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-018-Q1-E1-H6
<400> 7271

gaccacgcg tcagcggacg cgtgggtccg tggccgatct actcgatctg gatcacaag 60
agtgagcctg aaatccttag ttgttacagt tcccatttct agctgcttat ctacaagcgg 120
gcacccctctg caaagttgca atgggtctaag ggatggcatt tggcgaagca gggaacaact 180
ttatcacacg tttcttagat gcaactgaaac gaagttgctt agtggtgaca ctactaaagc 240
cactcgaatt taacccccaa ttgtatcctt tgcagcgaac ttcttcagtt gtgtccttgt 300
atgccaccgt ggtagagtcc tggctaattt aacacaccaa attgtcttga cattttaact 360
cttaagatat cacctgtagc cactga 386

<210> 7272
<211> 315
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-018-Q1-E1-H7
<400> 7272

aggtaggatg ttttcttatg aagaactgaa gcttgcgacg tccaactact cacctgatat 60
gttaattggg aagggtggaa ccagccaggt tttcaaggca caacttgatg gcggaacatt 120
tgctgccata aagattctga aaccctcggg tgatgcaata cacgagtttg ttacggaggt 180
tgagaccgta accagcttgc agcatgagaa cattgtagca ctaaggggat tcagcttcga 240
gaactacaac cttgtgttgg catatgatta catgccccga gggagcttgg acaaagctct 300
tcatgggaag aatga 315

<210> 7273
 <211> 193
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-018-Q1-E1-H8

 <400> 7273

 ccacgcgtcc agcggaatcg acggcatccg gcgtggctgg gccaatcggc ctgaaccacc 60
 tctgcccggc ccagattcaa cacaatccag gccagctca tgttccagca ccagcatcag 120
 atgggcctgc accccgcgtt cctgcgccg cgggcgcagc cgattaagca atccgggtcg 180
 ccaccggcac aat 193

<210> 7274
 <211> 343
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-019-Q1-E1-A1

 <400> 7274

 aggtatctgc tgtgggctat gcaatcgac caaaataaat tctagccgat gataattatg 60
 caacttaatg aatcgatccc tacatccaga gttacaattt ggctccatat aagcggtaga 120
 ctttttatat ctcatcgggt tccgatagaa caccagctaa catgtcccaa cctattcggg 180
 ccatatgtga ggtattctaa cacaaacgggt cccaaatagg aaccctttgt ggtgctcgat 240
 tcgtttcaca aacgggcgaa aatataaaaa ccgtctgtga tgcgcgattc gtatcaaattg 300
 ccattcgtaa ttagaccga atgggaattg attaccatag att 343

<210> 7275
 <211> 164
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-019-Q1-E1-A10

 <400> 7275

 agctagttct agaccgccga ccggcctggc ctacttcttg agataatcaa gatcattgcg 60
 gacacaaata ttgatgtgga atcagctgag attgatactg aaggtttggg tgcgaaggac 120

aagtttcatg taagttacag aggtggaaaa ctaaacaggg cctt

164

<210> 7276

<211> 281

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-E7

<400> 7276

acttcattac agaacttcgg ttctagattc atgccgtgat ggagcttcat ttggaccata 60
aggtctaaga tgtcatgcaa ttgtctggta atcagcggat gccgatcaaa cttcaactgc 120
ttcaacgatt ttcctgagat agatgagact accaacttcg cgcattgcaac catcgatcatg 180
tacttgtcat tggcgtatac tgagttcagc ttattatacc tgtgaaagtt ctattactat 240
cagtcgtcat taaactcttc atttcattga atccaaccgt g 281

<210> 7277

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-F10

<400> 7277

aagaaaaaaaa acacgagaaa aatcaaata ggagacgggg attccagaga gcccctgtcg 60
ggtagggaag ggaaggagag gcgaagcgga ggagagatgg gggcgggcga atccgtgccg 120
gagacctcca tacacgaatt caccgtcaag gattgcaacg gcaaggaagt gagcctggaa 180
acctacaagg ggaaggctct ccttgttgtt aacgtcgcct ccaaattgtg gttcacggag 240
accaattaca cgcagctgac ggagctttat cagaagtaca gggacaaaga cttcgagata 300
ttggcattcc cttgcaatca gttcttgcca caggagccag gtactgatca gcagatacaa 360
gactttgctt gcaccagatt taaagctgaa taccagttt t 401

<210> 7278

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-F11

<400> 7278

agcggacgcg tgggaaaagg ggtactcttt ctacaactac attagtatta gtctcgaaat 60
gctttaaacg ggaaatagct agtgtagaat ttatctgata tagaactctc atatcgataa 120
aatagtttga actatttact agaagggcac gcagcccttt ttccaatgcc aaatcgacga 180
cctatgtata aaaaaaagag aaattttttg gatttgaaga aaaaataaaa ggaattctat 240
caatttttat tttccattta tttagttagt ttttcttaat gaaattgaaa ttattaacta 300
acagagcaaa cacaataaaa gaaacaactt tgctgaccat gatagatttt tatctagttg 360
gaagagtccct cttaatatcc atctagtcct 390

<210> 7279

<211> 341

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-F4

<400> 7279

accacgcgct ccgcccacgc gtccggtatc ctctcagttg ctgccattga taagggcact 60
ggaaagaaac agaatcacia catggtgcaa taccaccaa ggtaagttta aaaatggaaa 120
aaaccataat tttccagggg gacaaagaga agagagatgc aatcgacacc aaaaaccagg 180
cggactcagt ggtctaccag actgagaagc aactgaagga gcttggcgac aaagtccccg 240
ctcctgtgaa agagaaggtg gatgtgaagc tccaggagct caaagacgcc atttctggtg 300
gatcaacaca gagtatgaaa gatgccatgg ctgctctgaa c 341

<210> 7280

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-F8

<400> 7280

cccacgcgtc cgcttcaatt ctttgaaaaa ccaaaggggtg ctgatttgaa ttctatgaga 60
gttgagacca acttctctgag ctatgtctata gatgatgcac agaaatatcc ataccttgca 120
tcaatgggca tttatgtctt caagaaagat gcacttttag accttctcaa gtcaaaatat 180

actcaattac atgactttgg atctgaaatc ctcccaagag ctgtactaga tcatagtgtg 240
caggcatgca tttttacggg ctattgggag gatgttggaa caatcaaatc attctttgat 300
gcaaacttgg cctcactga gcagccttcc aagtttgatt tttacgatcc aaaaacacct 360
ttcttcaactg cacccegatg cttgcctccg acgcaa 396

<210> 7281
<211> 393
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-018-Q1-E1-F9
<400> 7281

agtgaagaag ctcaacaaga acaagaagct catcaagaag cttgctcgca agtacgatgc 60
cttcgtcgct tccgactccc tcatcaagca gatccccctg ctcttgggtc ctggtctctc 120
caaggccggc aagttcccta cccccgtctc ccacaacgag gacctttccg ccaagatcac 180
cgacgtcaag tccaccatca agttccagct caagaagggt ctctgcatgg gtgtcgccgt 240
cggccacgtc gacatgaccg atgaggagct cgtcggtaac gtcattgtgt ccatcaacta 300
cctcgtctcc ctctcaaga agggctggca gaacgttggc tccctcacc ctaaggcttc 360
catgagcccc cccaagcgtc tctactagac gtt 393

<210> 7282
<211> 349
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-018-Q1-E1-G12
<400> 7282

cccacgcgtc cgagggtttc cttcctctc cagtgtgtc atcgccgccg ccaccccggt 60
ttccttcgta agcccgtcgt cctccgtccg cgactctgcg cgagaagcga gagtatggac 120
accaagtga agcttgcgtg tgtggtgaag gtgatgggaa ggaccggctc caggggtcag 180
gttaccacagg tcagagtga gttcttggat gaccagaacc gtctcatcat gaggaacgtc 240
aagggaaccg ttcgcgagg agacatctc aactgcacg agtctgaaag ggaggctagg 300
aggctgcgtt gaggcgggat actgtcttgg tagttttcgt atggagttg 349

<210> 7283
 <211> 384
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-E5

<400> 7283

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 tcggatcccc atacgatcta ctagctagct aagctacacg actcgaccga ggaggaggag 120
 cgcgctcagg ccgtatagaa acttgaggca tgctggttaac caccgaagtg tttgggcctc 180
 ccggctacag gcgggtggtg atctattaca tcgtcaacga tactgatcaa ttgagtaaag 240
 ctctgaaccg acatgatcac ctggtggtgt tcatgttctc ggcgaggagg aacgaaccct 300
 gcaaggcgat gaagaaaccg ttcagggaca tggccagggc tagaaagatg caggccgtat 360
 tctgcttggt ggacatcgac aagc 384

<210> 7284
 <211> 247
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-D1

<400> 7284

gcgtcaagtc taggtgcaaa aaagcgggaa acaaagcgaa gttggggcgg cgagacgcga 60
 gacgcgagac gcgagaaatg gcggagccgc ctttggccgc cggctgcacg acaaactgga 120
 ggagggaggc cgatgagcgg ctgcggtccc gccagtcctt cctcttcggc gccgactccg 180
 cactcgacca tggggatcct acggtcgcac aggcgctcgc tctcttcctc cacggcatcc 240
 tcctact 247

<210> 7285
 <211> 373
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-D12

<400> 7285

cccacgcgtc cgcccacgcg tccgagagca aaggcagcac actcagctat ccagcaaaag 60
agatcgagac gcaggagtca tggccaccgt cagcgccgcc gtggtgacca ccatcgttgc 120
ccgcgccgcg atcgccaggc ccaatgctct agggctgcct gcgttgaggg cgaggagcga 180
gaggggtgcgg tgcagctacg ccaaggatgc caagaacgcg gccccagtca gcaccaaggg 240
cgcaggcgcg tgcgtgctcg ccgcagcggg cgcggtgacc gcgtcggcgg ggcccgcgct 300
ggcgctcgtg gacgagcgca tgtccacgga gggcaccggg ctgagcctcg ggctcagcaa 360
caacctgctg ggg 373

<210> 7286
<211> 376
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-D2

<400> 7286

agaataaagg gtgacagtga agctgaaagt tcgagtgata gcagctctga agatgctaga 60
agcaagagac accgccatgg gcggaagtcc aaggcatcat ctcaagtttt tgaggaaaat 120
attgctgcag tgtctgcttt gaaggatgcc acgtcacctc aacgaaagag tggcatacca 180
aacagtccag cacaagatgt ctccccgctg caaaatgggg aaaactatac aaatggtgtt 240
aatgaatcaa aaattgaaag gaatgcagct gtcattgctg ttctaactgg caaccaaaagc 300
aaatctagga gccagagcat gagtgttaat cactcaatga gcaagagtat gagcatcagc 360
ccaagaagaa gcccaa 376

<210> 7287
<211> 336
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-D4

<400> 7287

cgcgtccacg gaagcgtggg cgcattgtgag gtgctgtcca gcattgagca caataatgca 60
gaataacttgc gggatgacct attgacggct gcttcgctgg tcaaatacacc tctgtgtgca 120
gaaacattag gcacagtata aatgatgaag gatacaacgg attgtcacag ttttggtgcc 180

tttgactgta attggcagag tttctgggga cacagtggaa tggattaatt gcacctgatc 240
 actctgtatg tcgctgtcat gtctgcaatg ttcaagacgt acgtgatata gaatggaaat 300
 atatgccgca taggtacgag agaagggctg tcgctc 336

<210> 7288
 <211> 366
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-D5

<400> 7288

agattctagc taaaagtcaa actgtggctg gatTTTTcct tgttcaatat gtcacttgt 60
 ggcaagatca tcttaacaaa ctttttgacc tgtatgcctc tggaaagcta aaggtttccc 120
 tagaccccaa gcaattcttg ggtgttgctt cagtcgtaga tgcggtcgaa tatcttcatt 180
 ctggcaagag tgttggcaag gtcgttgtgt gtattgatcc atcatcaggc cagatcgttg 240
 caaaattata atccatggac atgatgcgca ttgtcttcca tggtcacgta ggttactgtc 300
 ttatagttac acatatacct caagaccgta ttttcccagc gggtgacaaa tgaataaggg 360
 aacatg 366

<210> 7289
 <211> 390
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-E12

<400> 7289

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 tgttgggagt ccaggaagtg aaggcttcat gtttgatcta gttgatagtt ctgagctaga 120
 cacaacaaca gtgcttcgat taccaccatt atctttaatt ccgattgatc aagactcttc 180
 aggcactttg tctgtacaaa ttccacagaa gtctttgcgt tccttgagcc ttaaatttca 240
 tggagacata gtcaatattg cagaaagcag tgctatcaaa aagaaagaag gcacatcaac 300
 caacactact gctgaagccg aaaatgatgt tttggcagat gatgatgtca ataagtctat 360
 tagacatgca aattccatcc ttcgtgatat 390

<210> 7290
 <211> 378
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-018-Q1-E1-C8

 <400> 7290

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 ctggatagtg caattttgta ctatctagcg actaataaaa agaaacggag ggagtactat 120
 tttttagcta aaccttgaac tagttattag ccaactagct agccaacacc agctactttg 180
 agctccacat cccaactagt aactagcctt agctcatoca aacaagccct aaaacatgaa 240
 attgatgctt actatgggca tttggtgaga attttaggcc tgatgggatt gcagaaattt 300
 gagtgcaaac agcaaagtggt ttatctctct gtccagctag cttattgggt tcattttcat 360
 agtcttctta cgagaact 378

<210> 7291
 <211> 360
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-018-Q1-E1-B11

 <400> 7291

 cttgcttgag tagcgaagcg cgagagcaat ggcgtcgctg tcgtgcgcct ccacgctgcc 60
 ctggaccccc gcctcctccc cgcggccctc ggcggaccgc cgcttcacgg cctctcgccg 120
 ggctccgctg ctggtcatcg tcgcccaggg gaaggtgaag aaacaccctc aggtcatatt 180
 gacagatgac atagaagagg tggggaagaa aggggataca atgaaggtgc gagctggatt 240
 ctaccgcaac tccttgcttc ccaagggcaa ggcgtcgctt ctaaccccag cagtccacaa 300
 gcaaaataca atagtggcat ctgagaatga aaatccacct ttaatgccgg caatcatgac 360

<210> 7292
 <211> 376
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-018-Q1-E1-B3

<400> 7292

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caagcaaagg acagcagatg cagtttctac agtggagtcc ctccctcgcc ccaccagcac 120
aaggttcctt tcatacgaag aactgaaagt ggcaacaaat aacttcgagc cttcaagtgt 180
gcttggagaa ggtggttttg gccgtgtctt caagggggta ctgggtgatg gcactgctgt 240
cgctataaag aagcttacta acggagggca ccaaggagat aaggagtttt tagttgaagt 300
ggaaatgctg agcaggttgc accaccggaa tcttgtgaaa ctgattgggtt attacagcag 360
ccgtgaatca tcacag 376

<210> 7293

<211> 350

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-C12

<400> 7293

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catatggggg ttctacaagc atcatcaatg ggctggaatg gtgctcctgt acttgctgcc 180
actcctgttg tcaagaaagt catgaggctg gatgttccag tagacaagta tcctaactac 240
aactttgttg gtcgtttatt ggggccgcga ggtaactccc tgaaaagggt tgaagcttca 300
accaatgta gagtttacat tcgaggacgg ggttctgtga aagactctgt 350

<210> 7294

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-C3

<400> 7294

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gcttatcgag aaagatcact gcgagtctac aacaatccac acccaacaca ggcggtggac 120
acaacccatc caataatctt tcatgagtac agtgtcggag tcatcggcca atttcttcaa 180

aattatcatt aatttatgat gttcatgtaa ctatagtcgt aggataaggc agggccggtt 240
 tggtttcatc acgcggatgg gagcaccttc ttgacgatct catcactgag cgaggcgatc 300
 tgggcgtcga gcgccttaac agcctcctcc ttctgcgcct cgaggttggc gagcgctctc 360
 acgagctcgg cctccaaacc gctgcgccc 389

<210> 7295

<211> 348

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-C6

<400> 7295

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 gaacgtcttc cccgcgcga gcggtatgac tctggagccg aggtaccgcg gcgtccggaa 180
 gcgcccctgg ggacggtag cgaggagat cccggatccg gccaggaagg cccgcgtgtg 240
 gatcggcacc ttctacaccg ccgaggccgc ggcgcgcgcc tatgacaccg ccgcgtcca 300
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<210> 7296

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-B10

<400> 7296

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 agccgttatc gccgcgcgcc gcgtcccgg tccgccacc tccgacctg ctgacaggct 180
 ccaggtttat cctcgacttc tcgttccgc cacatccagg ccccggcgcg ccccggcgcg 240
 agtaccacag gatcgaggcg acggcgaggc gaggcgcgcg aactgagagc gccaaggtca 300
 ggaaccgtcg gctgcagaag aagttcaacg gcacggcgac gaagcccaga ctctcgtgtg 360
 tctgctcaa ccggcagctc tacgtgtgc t 391

<210> 7297
<211> 349
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-H4

<400> 7297

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agcgatgtca tcgataccat caaacatgct tttgggggat cgccacaaat tgtttgcaag 180
aggggttcaa tcgaagaact taggttatgc ttcgacaaag aattgaagcc tcgtgattgc 240
cttaccactt ctttggcgaa tggaagtgtg tcaaaaagca agcactgccc gcggtacatc 300
accttgccaa catatgatcc ccttgtgctt gccaatcaaa ctgtagaga 349

<210> 7298
<211> 251
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-H5

<400> 7298

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gcgtcttctg cgacatgacc gtcggcgggc cccggcgggg ccggatcatt atggagctgt 120
acgccactga tgttttactc accgcgtagg aggtggcatt gaagatcatc ttctttaagt 180
tctacctatc gctgattaca tcggttcaga agtaactttt caaagctaac gctcgtccga 240
tcaatctgaa c 251

<210> 7299
<211> 389
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-H6

<400> 7299

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gcttcctaca aggcagagaa agatggaatc cttcagtctt tagctcgccg tgcaaaggca 120
 ctggaagatg cattcaacac gcttgaggga ttttcatgta acaaggctga aggagcaatg 180
 taccttttcc ctcagatcca tctgccacat aaggcaattg aagctgctaa agctgccaag 240
 aaagcacctg atgcattcta tgcgctccgt ctccttgaat caactggaat tgttgtggtt 300
 cctggatctg gatttggcca agttcctgga acatggcacg tcagatgcac gatcctgccg 360
 caggaagaca aaatccccgc gggtgataa 389

<210> 7300
 <211> 451
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-017-Q1-E1-H8

<400> 7300
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 cacccttgcc cttgacctct actccaagta taacgttacg gaaatgctgt caagtggagg 120
 gatacagggt tcaaatggta aggaatatgc actgagcgat gtcacgata ccatcaaaca 180
 tgcttttggg ggatcgccac aaattgtttg caagaggggt tcaatcgaag aacttaggtt 240
 atgcttcgac aaagaattga agcctcgtga ttgccttacc acttcttttg cgaatggaag 300
 tgtatcaaaa agcaagcact gccgcggta catcaccttg ccaacatatg atccccttgt 360
 gcttgccaat tcaactgtag agatcatgac acagttccaa gaaatttgat ttgcctgaag 420
 ctctttatac agcttaaaat gcaattgttg c 451

<210> 7301
 <211> 364
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-018-Q1-E1-A11

<400> 7301
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 aacgggagaa agggcaaggg caagggcgtg taccagttcg tcgacaagta cggcgcgaa 120
 gtcgacggat acagcccaat ctacaacgag gatgactggc ctcccaccgg cgacgtctac 180

gtcgggtggaa ccaactgggct tctgatctgg gcggtcaccc tcgctgggat cctcggcggc 240
 ggcgccctcc tcgtctacaa caccagcgcc ctctccggct aaggatatcc aatgcatgcg 300
 cttcttgaga ttcgtcatgt aaaatcaggg tgtctgtcta taatctagcc tccatggatg 360
 ctca 364

<210> 7302
 <211> 368
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-018-Q1-E1-A2
 <400> 7302

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 actattacca tttagccagc tagctactgc ctactctcag caacaacaac ttcttccatt 120
 taaccaattg gccgcactga accccgctgc ttatttgcag cagcaaatac tactaccatt 180
 tagccageta gctgcagcaa accgtgcttc cttcttgaca cagcaacagt tgctgccttt 240
 ctaccagcag tttgaggcta accccgcaac cctcttataa ctacaacaat tgttgccctt 300
 tgtccaactt gctttgacag acccagcggc ctctatacaa caacacatca ttggtgggtgc 360
 cctctttt 368

<210> 7303
 <211> 129
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-018-Q1-E1-A3
 <400> 7303

acctcagctg attatctga gcagtggcca agtctccttc attgggtttc acacaattta 60
 gacttgcaga accaaatttt tgggtgcttta catgtctga gggttcttgc cagaaaaatat 120
 gagttcaag 129

<210> 7304
 <211> 293
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-018-Q1-E1-A5

<400> 7304

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cgtgctacct gtgatcaacc aagtagctct ggcaaacctt tctccctact ctccgcaaca 120
acaatttctt ccattcaacc aactgtctac actgaaccct gctgcttatt tgcagcaaca 180
actattacca tttagccagc tagctactgc ctactctcaa caacaacaac ttcttcatt 240
taaccaattg gccgcactga accccgctgc ttatttgcag cagcanatac tac 293

<210> 7305
<211> 369
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-A8

<400> 7305

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cgccggcgag atgaagaagg ggctcttcgg cgtcatgcac tacctcatgc ccaagcgcg 120
catcctctcg ctgcactccg gctgcaatat gggcaaggac ggcgacgtcg ccctcttctt 180
tggcctctca ggtaccggga agacgacgct gtcgacggat cacaacaggc ttctgatcgg 240
cgacgacgag cactgctgga gcgacaatgg cgtgtccaac atcgaggag gctgctacgc 300
caagtgcac gacctggcg aggagaaaga gcctgatatt tggaacgcca tcaagtttgg 360
aactgtgct 369

<210> 7306
<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-A9

<400> 7306

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aagtgttggg tttaaagctg gtgttaagga ttataaattg acttactaca ccccgagta 120
cgaaaccaag gatactgata tcttggcagc attccgagta actcctcagc tcggggttcc 180

gcctgaagaa gcaggagctg cagtagctgc ggaatcttct actggtacat ggacaactgt 240
 ttggactgat ggacttacca gtcttgatcg ttacaaagga cgatgctatc acatcgagcc 300
 cgttcctggg gaccagatc aatatatctg ttatgtagct tatccattag acctatttga 360
 agagggttct gttactaaca tggt 384

<210> 7307

<211> 383

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-017-Q1-E1-H3

<400> 7307

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 tcaattttac tcaaggaatc cttgaaggga ttgtangaga ggagcttga gttttacctg 180
 gaatggattc gatctgttta gtcttagctc ttcagaagct ccttaatttc ttttcatctg 240
 gaaggagtaa ttcacaatca gaatttgatg tgatcgtgta tgattgcaac aatacagagg 300
 aaattctacg gctgataagt gctgctgacc gggcaagatc ttacttgagg tatgtgaggg 360
 accttgctga gaaaactgac atc 383

<210> 7308

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-G1

<400> 7308

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 tcctccttta aataggatat gctctaagtc ttcccatact ttctataat gactgcaacg 180
 attttctcca ttttgcaat tcctatttta tttgaagtat attactatca tatacattat 240
 ctaaatcgat ccactttaaa taaaatagaa aaaatcgaaa gaaaaaaaaa aaaagaaaga 300

gtaaataata aaacaggata ttctgtttca taattctgaa atagagttct tttttttagt 360
attactcctc attaggatgt atatattaat catcctaatt taataaaaaa taaatcaccc 420
aatt 424

<210> 7309
<211> 366
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-G2

<400> 7309

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ctctgcaccg gatgatctca taataaggta acactggcat ttggtaacc atagacgaat 120
aagaatgagg gaaatttcag aacatgttcc ggtgatacta attagctaga ggaaaatttg 180
acacggaaag ttccttattc tgtacaatgt gcctttgtgg tgagtaaaga tgtccatttc 240
atatggcctt tgtgatgagt atgtctgcat tgaaaagtta gtgctttcat tcttgataat 300
ggacacttcg atttgattca aaaaagataa tcagtttcat aattctgaaa taaaattcat 360
ttttta 366

<210> 7310
<211> 373
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-G4

<400> 7310

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tcagtaccgg attatcgcat agggatgtaa cactggcatt ttggtatcca tgaacgatta 120
tgaatgaggg aatatttcag agaatgttcc ggtgatgcaa actaactaga ggaaaatttg 180
acacggaaag ttccttagtc tgtacaatgt gcctttgtgg tgagtataga tgtccatttc 240
atatggcctt tgtgatgagt atgtctgcat tgaaaagtta atgctttcat tcttgataat 300
ggacacttcg atttgattca aagacgatat tctgttgcac aattctgaaa taaagttcct 360
ttttttagta tta 373

<210> 7311
<211> 382
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-G5

<400> 7311

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aaaaaaaaaa aggatggacg tccgccttga gaccttgcct caccgagtgc tctcggtgag 120
ctactttgtt tcgatttatc acgaaatccg tttgcttcat gttgtgcatg ctcatatctg 180
attgctggat tcggtaaacc ctcatggat cctgtatcgg ttagtccttg ccatgcaagg 240
ttcttgtatg ttaatgttttg gtggtcgagc atcgcatggt ctgcttctgg atccagatct 300
ggagaaatcg cgaagtcacg gtcgttcggt tcggagcgga tctaaagcga ctatatatgg 360
aggctgcggg atctctcggt ct 382

<210> 7312
<211> 378
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-G6

<400> 7312

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tctagatcca ggatggccgt cctccttgag acctggcctc accgagtgtc ctcggtgagc 120
gactttgttt cgatttatca cgaaatccgt gtgcatcatg ttgtgcaggc tcatatctga 180
ttgcaggatt cggatatacc tcattggatt ctgtatcggg taatccttgg cttcaacgtt 240
cttggtgtta tgttttggtg gtctaccatc gcatgttctg cttctggatc cagatctgga 300
gaaatcgoga attcctcatc gttcgggtcc gaccggatct gaagcaacca ttatacgagg 360
ccgcgggatc tctcggtc 378

<210> 7313
<211> 396
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-G7

<400> 7313

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gatatTTTTcc ctcttatgc tccttgctct ttctacatgt gttgctaacg cgacaatttt 120
ccctcaatgc tcacaagctc ctatagcttc cctTTTTccc ccataccttc catcaattat 180
agcttcagta tgtgaaaacc cagctcttca accatatagg cttcaacaag caatcgagc 240
aagcaacata cctttatgc ccttgttgtg tcaacaatcg ccatccctat ctttggtgca 300
gtcattggta caaaccatca gggcacaaca gctgcagcaa ctctgtctac ctgtgatcaa 360
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<210> 7314

<211> 376

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-017-Q1-E1-G9

<400> 7314

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aaggtttcat ggaagaatac tcttacgaat gggattgtta aggtatcttg cattagcgtt 120
ggtaggatgc cattattgaa aaggcatgat cggactttca agttggcgga tccttctcct 180
gagcattgcc caccaggaga gtttgtccgg gaaatcccac tgcctaccg gatccctgaa 240
gatgccactc tggaagcata ccgcgatgaa acggggacag gcctggagat tattgtcnca 300
aagtaccgtg ttggccctga agaacatgag gtgcatgtgt ccatgagacc gccctcgta 360
tggtgccaat gaaact 376

<210> 7315

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-H1

<400> 7315

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ggtggaactc ctgaaggaga tacgggcgca cgaagtggcg atcgcgagc tagacaacct 120
 gaatccctcc cgggcggtgt accagaaagc tggcaacatc ttcttctgta agagcgtcaa 180
 atcggtgatc acaacggagc agaagcaact tgaccaagcc aaggctcggc tgagcaagct 240
 gaaccaagct tgatgggcag cacgctacaa atgttgacct tgaacacaat agagcatgca 300
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 atgtgtaatg ctactttctt t 381

<210> 7316
 <211> 403
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-017-Q1-E1-H10
 <400> 7316

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 gcgcgagaag cgagagtatg gacaccaag tgaagcttgc tgttggtgtg aaggatgatg 180
 gaaggaccgg ctccaggggt caggttacc aggtcagagt gaagttcttg gatgaccaga 240
 accgtctcat catgaggaac gtcaaggac cggttcgca gggagacatc ctcacactgc 300
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 cgtatggagt tggatgtcat ctaattgtgc tatgtttgtc aaa 403

<210> 7317
 <211> 371
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-017-Q1-E1-F8
 <400> 7317

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 agaaccaggt ccaggatatc ctgcaactgt cgatgaagct tcggctatgg ctcacgtcgt 120
 aagtgccgca tgaagtacc tgatctgcat gatagcacca acggcgacac tgccagcgta 180
 gtactcgggc tggcacacga aaagcaagca gcacacgtct tactcatcgc cgctgaggac 240

ttcgtgaacg cgcgcagtgc cgtcactgag gtcggcatcg caagtgcgag ctctgcatct 300
gatgatgaca tccattaacg atcatcgctc taactacaac caagcgacct tgtcctgctg 360
catgagcaac a 371

<210> 7318
<211> 392
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-017-Q1-E1-E4
<400> 7318

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ttaaaaagaa atgatgaaaa atcaaaacgc cctaattgtg acaattttgc aagtcacgct 120
gtgcgtgtgg ttgggtacta tcataatttg atttattcta tatgtttgtc gattcatata 180
acgatattgc aagtatttgt cgaacgtggt tgaattagca agacatatag ctgtgagctt 240
tgatagcctc ccatattttt ttcagttcat attttacatt aacgtttttg tgcgggtgctt 300
gaaaatattt cgagcgtggt gttgtttttt ttcagttgtc ttagtcatgg actcatggta 360
gaatgctacc gcttttaagg ctattgtttg tc 392

<210> 7319
<211> 361
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-017-Q1-E1-E5
<400> 7319

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cactggagat atcatttttg ttctccagca gaaggagcat cccaagttca agagaaaggg 120
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tgttgtgact cacttggata acaggcagct gctgatcaaa tcaaattccg gcgaagttgt 240
gaagcctgat tctttcaagg cgatcaacga cgaaggcatg cccatgtacc agaggccggt 300
catgaagggc aagctgtaca tccacttctc ggtggagttc ccagactcgc taagcccggg 360
g 361

<210> 7320
 <211> 367
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-E6

<400> 7320

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ggggagcact cgccggccac gacgaggtag cggaggacag cctgggtcaat ctgcggtacc  180
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gggagtgccg cagcccgtgc caggtagctcg gctacgacgt gcctcgtggc accatggtgc  300
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tgccgga                                     367
  
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<210> 7321
 <211> 360
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-E7

<400> 7321

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taacaattca gatattgaat tcgttgatgg gacaccatat caaacacagg tggaaccatc  180
tactttggaa caaggtcata tcccgataa taaccaaagt agagatgttg aggtcccacc  240
atcttgtgct aaactggatg ttaatgtgca tgcaatcctt acccaacttc ctgatgctga  300
attgcataat ctgtgcaata ttcttgcaact tgagggtctt ccagataaag tgtactcact  360
  
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<210> 7322
 <211> 382
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-E8

<400> 7322

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acttggagca tgctgttaac caccgaagtg tttgggcctc ccggctacag gcggtggtgg 180
atctattaca tcgtcaacga tactgatcaa ttgagtaaag ctctgaaccg acatgatcac 240
ctggtggtgt tcatgttctc ggccgagtgg aacgaaccct gcaaggcgat gaagaaaccg 300
ttcagggaca tggccagggc tagaaagatg caggccgtat tctgcttggg ggacatcgac 360
aagcttaaag atgctgtggc gc 382

<210> 7323

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-E9

<400> 7323

ggcggagaaa gcaacggtgc tggcgctgc gccagagcgg cgcgaagagt tcgacggcgg 60
gcggatcgtg gacatcagcc actactaccg cgaggacatg ccggagtggg agtcatcaga 120
gggctccggc gagttcctgc agctggcgcg gtccatgcgc aacggctccg acatcgctaa 180
cttctcggag ctccggctca ctgcgcactc cggcacccat gtcgacgcgc cgggacacgt 240
cttcgagcac tactacgaca ccggcttcga cgtcgacacc ctcgacctcg ctgtcctcaa 300
cgagttgaaa cgggtgtgcag gaccagcgct gttggttgac gttcctagag ataagaacat 360
cacagctgat gt 372

<210> 7324

<211> 379

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-F1

<400> 7324

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agagcccaga ttcaaaatga agaaatggaa actcgaaaag gatccttctg attctcaaag 120

aatgaggggc aaggggattg ataccgagaa agattttcttc ttattataag acgtgatttg 180
atccgcatat gtttggtaaa agaacaatct tctcctttaa tcataaatgg aaagtgttca 240
attagaacat gaaaacgtga ctcaattggc cttagttagt cttcgggacg gagtggaaga 300
agggcgagaa ctctcgaacg aggaaaagga tcccttcgaa agaattgaac gaggagccgt 360
atgaggtgaa aatctcatg 379

<210> 7325
<211> 388
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-F11

<400> 7325

acatgatttt ggcgatggtg tctcctgtca ctcattctgt gggcaactgt gttaaacgtg 60
ttgtgggtcat tgtaacatca gtgctgttct tcaggacacc tgtttctcct atcaactctc 120
tcggtaagca tgtttcttaa cctgtttctc tgtctttgtt ctatttcac cttctgttgt 180
atcaccatta catgctttca tctgtgtgta taggtactgc gattgcactt gccggagttt 240
tcctgtactc acagctcaag cgacttaagc ccaagccgaa gacggcttaa atagggattg 300
tattttccat ctctttgtgt taatggagtt aaacacttct atgtttcagg tgactgcatt 360
ttaaagatt tgtgcttata acaacaac 388

<210> 7326
<211> 363
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-F3

<400> 7326

accttaaagg ctttgcaacc taacttttca acggtaacaa aaaaattcac ttcaaaattc 60
atggaaaacc cccacaaaaa tattctcaca aaacccttgc acaatcaagg aaggacacaa 120
ttaaatttc aataccatga taacagtgat ttaaagacta ctcacgatct taccgtgtgg 180
tcttcaagaa ctgagcaaca gagaaacaat attgctgccc agacaaagct atgtctggag 240
ggttgagcgc caactagaag tctgaaggc tacaatcaga tattctcggc atttaaacca 300

ctgaaagata tacataaccc acttggctct tttcctagtc aaatatctgg gactcactca 360
aat 363

<210> 7327
<211> 403
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-F5

<400> 7327

agtccctccc ggagaaccag aaggctaccc accctccaag gcaggggagg ggccatggac 60
gaccccgctcg agcgcttgaa ggacgggttc cacaagttca agaccgaggt ctatgacaag 120
aagccggagc tgttcgagcc tctcaaggcc ggccaggccc ccaagtacat ggtgttcgcc 180
tgctccgact cccgctgtg cccgtcgggtg aactggggac tgcagcccg cgaggcattc 240
accgtccgca acatcgccgc catggtccca gcctacgaca agaccaagta caccggcatc 300
gggtccgcca tcgagtagc cgtgtgcgcg ctcaagggtg aggtcctcgt ggtcattggc 360
cacagctgct gcggtggcat caaggcgctc ctctccctcc aag 403

<210> 7328
<211> 360
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-F7

<400> 7328

accacgcgt ccgaggacgc gtggggtctt ttcagttatc actagatgta aacaccctat 60
tttacagccc ctacatata ctacttggac acccacaaaa acagatcaaa ttttgcaact 120
taatatttta gtaatttggt tttcttttat ttatatggac caccagatag tggatctgag 180
ggactataaa agagattctt tgtatgccgt atgcaaagaa ttttttccgt ttgatttaaa 240
aaaaaaaaa aaaaaaaaaa agaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
aaaaaaggca aaaagtaaca gttgcacaaa gacgaaagag aagtcccga tttcaatgcg 360

<210> 7329
<211> 350

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-017-Q1-E1-D1

 <400> 7329

 cccacgcgtc cgcccacgcg tccgcccacg cgtccgccc cgcgtccgcg aggcggggat 60
 gacgagccca atggtggcca ccccggtcca gttccacaca accggccgcc tcagcttctg 120
 ctccctttcc tttccacgcg catcagggag gcggcgattc gcggcggtga gggcgtccgc 180
 ggagacgatg gcgacggaga agctgggcat caaggtggag cgcaaccgcg ccgagtcccg 240
 cctctccgag ctggcggtcc gccagtggcc caagtggggg tgcgagaaga gcaagttccc 300
 gtggacctac tccgccaagg agacgtgcta cctgctgcag gggaaggtga 350

<210> 7330
 <211> 381
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-017-Q1-E1-D11

 <400> 7330

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 atgccgacag gtttttatga tactatccca gaaccagtgt tttggcctgt ctttgtggtg 120
 gccacacttg ctgctgttgt tggtagccaa gctgttattt cagcaacatt ctccattgtg 180
 aaacaatgcc atgctttggg atgtttcccg cgagtgaagg ttgtccacac atcgaggtgg 240
 atctatgggc agatatatat tccagaaata aattggattc ttatggttct ttgcgtcgct 300
 gtcactattg catttcgtga tactactctt attggcaatg cctacggtat tgcattcatg 360
 actgttatgc ttgttactac a 381

<210> 7331
 <211> 371
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-017-Q1-E1-D2

 <400> 7331

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aaaacacatc aagttggttg aaccagccac ttccccaggt tgaacagtca cgagtgggtca 120
 ggccgcatgc aacggttgct ccatttgatt tagagaagac tagagaaggc agtgggttca 180
 aaatatttgg ttccaagtt gatacaacca atccatcacc tgtccaattg agctctccat 240
 tgtctgctat ccgagagcat gtggtacaaa ctgcaccatc ggcaccagtg aatgaattgc 300
 aacctgtgca aattgagtgc ttgcctgagg tgtccgtaag cacagctgga actgcagctg 360
 agaacattca g 371

<210> 7332
 <211> 422
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-D3

<400> 7332
 atgcgattgt ttggtttaca taattgtaat gtgacgggta atcgataaaa aaaaaaaaaa 60
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
 aataaaaaaa aaaaaaaaaa ataaaaaaa aagaaaaaaa aattaaaaag gggggccccc 240
 caaaaaaaca aaacctttac ccaacttaaa cggcattcaa aaaaccccca aattggctac 300
 ccaaaaataa aaccaaaggy gccctttaa aaacccttc caagaaaaaa cccaggctta 360
 aaacaaatat gccaccgtca aaaaaaacc cctttccaca aggggggtat aaacgaaaaa 420
 gc 422

<210> 7333
 <211> 362
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-D5

<400> 7333
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 tgggggagtc ggacgttgag taccgttgct tctgtggcgg cctcgcttgg gccaccgacg 120
 accactccct caacaacgcc ttcagcacct acggcgaggt cctcgagtcg aagatcatcc 180

tggatcggga gacgcagagg tcccgcggct tcggcttcgt caccttctcc acggaggacg 240
 cgatgcgcag cgccatcgag ggcatgaacg gcaaggagct cgacggccgc aacatcaccg 300
 ttaacgaggc ccagtccgc ggcgccgtg gaggcggcgg tggcggatac ggtggcgggc 360
 gc 362

<210> 7334
 <211> 380
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-017-Q1-E1-D6
 <400> 7334

cccacgcgtc cggattcatc gcgattttaa ggcaagcaac attcttctgg agcatgatta 60
 cacaccaaaa gtgtcagact ttggacttgc caggactgca aggggagagg ggaaccagca 120
 catctctacg cgtgtcatgg gaacattcgg ctatgttgcg ccagagtacg ccatgacggg 180
 tcatcttctt gtaaagagtg atgtgtacag ttacggagtt gtattgcttg agctcctcac 240
 tggtaggaaa cctgtggata tgtcacggcc cgctgggcaa gaaaacctag ttgcatgggc 300
 tcgaccgctt ctaacaaatg ttctgagtct acgccaagct gtcgatccac ttcttggacc 360
 taacgttcca ctggacaatg 380

<210> 7335
 <211> 366
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-017-Q1-E1-D7
 <400> 7335

ctctaccgtg gtttcatgcc ctccgttget ggtatcgttg tctaccgtgg tctgtacttc 60
 ggtatgtacg actcgatcaa gcctgtcctc ctcaccggtt cctcagaggg taacttcttg 120
 gcctctttcg ctcttggttg ggccgtcacc actggtgccg gtatcgctc ttacccctt 180
 gacaccatcc gtcgccgat gatgatgacc tccggtgagg ccgtcaagta caagggtacc 240
 atggacgccg cccgccagat cgtcgccgt gaggggtgtca agtctctctt caagggtgct 300
 ggtgccaaaca ttctccgtg tgttgccgt gccggtgtcc tgtccatcta cgaccaggcc 360

cagctc

366

<210> 7336

<211> 366

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-D8

<400> 7336

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acaagtccgg gatcaactac gggcagatcg cgaacgacct cccggagccg gcgcagggtg 120

cgacgctcct gcagtcgatg ggcgtgaaca aggtgaagct gtacgacgcg gacccccggg 180

tgctgacggc gttcgccagc acgggcgctg gcttcacccat cgccgtgggc aacgaggacc 240

tgcaggcgat ggcgccagc ccggacgcgg cgcgcggttg ggtggcggcg aacgtgcagc 300

cctacgtccc ggccacgcgc atcacctgcg tcaccgtcgg caacgagggt ctctcgggca 360

acgaca 366

<210> 7337

<211> 368

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-D9

<400> 7337

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tgatcattgc ggtaccagtg acaactacac cactgacgac gctgatgatg gccaattcac 120

gtgccgtaca tgctctgccg tgcacactac acaggcaact gctgctgac ctcatgactt 180

ccccgccact ggcaacatct ctgtccgctg tgttgccacc cagccaaccc ccaagcttgg 240

tgcccgacac cccgcgcctt acctgaggac cctcaggct gctcccgctg ctgctactgc 300

cgcttttgat gacttcacag agctgagtga gccgcccggac tttgtgtctg gatctggcac 360

gtgtgggg 368

<210> 7338

<211> 430

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-017-Q1-E1-E1

 <400> 7338

 aagttcctgg acctaggatg gttcctattc ctccaatagt aagaggaacc tttcattgtg 60
 aaaggtcatg cagcagtctc gaataccatg aagcaaattc tggcatacga catcatgtct 120
 cacacatttg tatcaataca tttcgaatca ataaagtttc cctcactctt tactgtgcac 180
 ttttctcaaa gatcacaatc ttgttgtaat gtgcctcatg taaagcaaac tgcgacaag 240
 gcatatgata gttttgatac aacaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
 aaaaaaaaaa aaaaaaaaaa aaaaaaacaa aacaaacaac aaaaacccaa aacaacaacc 360
 ccccaaaaca aaaaaacccc ccacacacaa caacccccac ccaaccccc acaaaaaaaaa 420
 agggggggccc 430

<210> 7339
 <211> 372
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-017-Q1-E1-E11

 <400> 7339

 cccacgcgtc cgcccacgcg tccgccgagt tcctcactgc catgatgaac aggcataaac 60
 tggagaagga ggaggatttg ttccttgctt ttcaacactt cgacaaagac gatagcgggt 120
 acataacaag agacgaactg gaacaagcca tggcggagta tgggggtgggt gatgaagcaa 180
 gcattaagga agtgctggac gaagttgata aagacaagga tgggagaatc gactacgaag 240
 agtttgtaga aatgatgagg aagggaagtt atacctgagg aagctctgtt ctcatgggtg 300
 gagaggttgt gtatatatgt ttcagcaa atgtgtcaagta caagcaacga agcaagttta 360
 acttagaaca ag 372

<210> 7340
 <211> 373
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-017-Q1-E1-E12

<400> 7340

acggacgcgt gggtagcgaa gcacaaccgt gccgcaaagc ttttcaactt acagctgcac 60
gcacttttgca cgaagctgag ggcagaattc gatggagcca gcatcactta cgtggacatc 120
cacacgatca aatacagcct gatcgccaac tactctcgat acgggttcga gcacgccact 180
caggcgtgct gtggatacgg agggccaccc ctgaactacg atggtaacgt accatgtgga 240
cacacgggtgt ctctggatgg taagatggtc accgcaaaag ggtgcagcga cactactgaa 300
ttcgtcaact gggatgggat acattacacg gaagctgcga atttccatat cgcctcgcag 360
atcctgaccg gga 373

<210> 7341

<211> 370

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-C9

<400> 7341

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atgttggett caacgtgaag aatgttgctg tcaaggacct caagcgtggg tttgtggcct 120
ccaactccaa ggatgaccct gccaaaggagg ctgccagctt cacctcccag gtcacatca 180
tgaaccaccc tgggcagatt ggcaacggct atgcccctgt gctggactgc cacacctccc 240
acatcgctgt caagtttgct gagctcatta ccaagatcga caggcgtctt ggcaaggagc 300
ttgagaagga gccaaagttc ctgaagaacg gtgatgctgg tatggtgaag atgataccca 360
ccaagcccat 370

<210> 7342

<211> 429

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-017-Q1-E1-B4

<400> 7342

ggtcctagat acccggggcc gaccaacgct tcgacggacc cttgggcacc gggttcccg 60

ctcgcccaat tccccgctgc cggcaccaat ctgaaatcaa ccgaacctaa cctttttcac 120
 caaaatggtg cttgtacggc atgcaaacat tggtaacaaa aatgcattca aaacactaat 180
 tgccgcaaaa tacaccggtg tcaaggttga gttggtgaag gactttcana tgggtgtctc 240
 caacanaact ccagagttcc tcaagatgaa ccctattggg aagattcctg tcctggagac 300
 tcctgatggt cctgtttttg agagcaatgc aattgcaaga tatgttactc gcttgaaggc 360
 tgataacca ctttatggat cttcactgat tgattatgcc catattgagc aatggattga 420
 ctttgctgc 429

<210> 7343
 <211> 374
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-017-Q1-E1-B6
 <400> 7343

cggacgcgtg ggataaaata tttcatgtag gttttgatat cgaagtccag tagtctgatt 60
 taattaggag aaccattgat gtacttgtac tccagatcgg agtttatagc ccgcacaagg 120
 tagcttgctg taactggcac tgcctcactc tttagagcct tcggttccat gtcagtatgt 180
 caccaactca cgatgacaaa ctggaatttg gaatgacatc tgcttgtgtg gaaatttcaa 240
 agccgaataa actatctctt caggcttcat ttgtcanaga ttccaaagta tattaacata 300
 gccacccttc gttttccatt ggaatcttaa cctgtaaaat tacgcccgtg caactgatga 360
 tggcatcaac acag 374

<210> 7344
 <211> 368
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-017-Q1-E1-B7
 <400> 7344

cggacgcgtg ggcggtcgag gcgggtagga caggatccag aggtagctag ccatggcgga 60
 ggaagcgtct gcgcctgcgg cggggacgga agcgccgccg gggaagatga cgatggtggt 120
 aggggtcgac gagagcgagc acagcttcta cgcgctgcag tgggcactgc agcacttctt 180

cccgcgcgggc cagccgcagc agtaccgcct cgtcgtcgtc accgccaagc ccaccgcgc 240
ctccgcgcgtc ggcctcgccg gccagggcgc cgcggatgtg ctgccgtacg tggaggcgga 300
tctcaagcgc tccgccctgc gcgtcgtcga aaaagccaaa ggcctctgca cacaggcgag 360
cgacgctg 368

<210> 7345
<211> 381
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-017-Q1-E1-B8
<400> 7345

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aggcaatgag ccttgcagcc agtttgcagt ataaaaaacc caattatgtc cactgttggt 120
tcgacgcagc gtgtgccgag gatttctact gccaaagcata agtgaattgc agataaatgg 180
tctgttcgca actggtgctc tcgggcgact ccatcactga gcaacccttc gccccggtgg 240
ctgcggtgtc gcactggctg acacctgctc gcagttgcat tacaagtttt actgactatg 300
tantttcagg tttattcaat ttcagttgta atgcttctga cagcagttgt atcagtcctc 360
ttgttcagct tccataataa t 381

<210> 7346
<211> 385
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-017-Q1-E1-B9
<400> 7346

attccggggc gagtacgcta tagaaggata cttggatact gaagccatgc atctttaaat 60
tgtaaacttt tctttttgtg gtttagtatg gatgaataaa aggggaaaaa gcaaaaggga 120
acaagcatcc tctgattttt attttgatga tgcaatctta gaaaccctac ctgaactgaa 180
cacctctttt ggcattttta aagtgcgtgca aaggaaacaa gcacccctct gcttttgtat 240
ctttagtatg ttgtcggcat atgtacgcta ttatgtcctt ttttggttaa atatctatta 300

ttcatggggtt tgctgttcac atgaatcgca tatagctatc acctttgctg cattcagggtt 360
 gatgctatgc tccaagaatt agaaa 385

<210> 7347
 <211> 364
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-C1

<400> 7347

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 tgctctgtac gaggggcacc gtgcgaagaa ggacccggcg aacgcgcaga ggcacaagat 120
 cgaggccggc gtggcaacgg cggcggcgct gggcgccggc ggctacgct accacgagca 180
 ccgcgagcag aaggaggccc actacgagag caggcagcag gagcacaggg tgccgcacgg 240
 gcacggggcac gggcacggct actcctacta ctgcgactga aacgactgat catcccatcg 300
 atcgagatat gcatgcagaa ctcgatatat atacggcccc tagcgccgta cacgtgcgtg 360
 cgtg 364

<210> 7348
 <211> 378
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-017-Q1-E1-C10

<400> 7348

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 gtccctctgcc aagacttttg caattctctc tggcgttcag agtttggtt tgtgcttggt 120
 gcgaaggcta cgtggcaagg atgacattgt caatgctggt atagctggt gttgtactgg 180
 cctcgctttg ggctttccag gggcgccaca ggcattgctc caaagctgtg ccaccttcgc 240
 agcattctca tgcacatgg aggggctcaa taagcagcag gctgcaatgg ctgcacgct 300
 tggagggact gncgccatgg ccgtgcatga gaaatgtggt gttctgcccc cgttcacgct 360
 tccacctatt cttgatgc 378

<210> 7349
 <211> 376
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-017-Q1-E1-C11

 <400> 7349

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 ctgctgcaat tgtacttcaa gccaaaggccg ccagaaggta gtaaaccacc accagctcct 120
 cctggaactt tgcctaattgg gactggggct cctgggtgctc caccaaggcc accggggcaa 180
 gctccccac caccgccgc acaaattcca cgcgccctc ctgcacctat gggaatgcc 240
 cctaggattc ctccaccacc tattggggct gttcaacctc cgccacctcc agcacgagt 300
 gcaaatggtc tggggccaat gattccaccg ccacctaact tcaactcccg agcaacccca 360
 ccgcgccctc caatgc 376

<210> 7350
 <211> 350
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-017-Q1-E1-C3

 <400> 7350

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 ggcagcggtg ctgccggtgg atatgggagt ggcggaggtg gtggaggtgg aggtggcggt 120
 ggccagggtg gtggttccgg atatggccat ggaggtggtg aaggatacgg ctctgggtct 180
 ggctttggtg gtggtgctgc tggcggcggc ggtggacatg gtggcggtgg tggcggcggc 240
 caaggtgggt ctggctatgg ctctggctct ggctctggct cgggatatgg atcaggtgaa 300
 ggatacggac aaggtggtgc tcatggagga ggctatggaa gcggtggtgg 350

<210> 7351
 <211> 429
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-017-Q1-E1-C4

 <400> 7351

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 ccaaaaaagc accacctgcy gcaagccggt ggcaaaagtt ctcaaggcaa gggtccggac 120
 aggcctccaa cgcacaagct tcccaggga gtgggcaaca aggattagta gtagtagtaa 180
 atttgatcat attggctaaa tgtacagtgc cattgtctgt agaggcttgc agtgccttcc 240
 cagctttgca cgcactcatg tgctccattt gtaaaatcta ggtgagtagg tatatagtga 300
 tgttgataac ctgaacctgt acgtagaaga caacaagcac ccagtgcctgc agaacaaagg 360
 tcaaacatgt acaatacaat agaacgaata caagtgtata catacatccg ctgtacaatc 420
 gcggtacgt 429

<210> 7352
 <211> 384
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-017-Q1-E1-C7
 <400> 7352

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 ttaagaattg ctgcttcttc agagtctgat gggagtggaa aaggcgagggt gtcactccat 180
 acggagttaa agctatctcc tgcccagaat gctgatgcc aacctaccat aggagctggc 240
 acaaatgatg cattcaggaa taagaaaaag caggatcgct cttcatgcgg ttctaacaca 300
 ccttcaagta gtgatgtaga tgccggcaat gttcctgagg aggacaatgc taatgagaag 360
 gccaaagcaag cctcctgcaa caac 384

<210> 7353
 <211> 375
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-017-Q1-E1-C8
 <400> 7353

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 agaagcgctt tatccggccg tacgtagcga taagagtggg gcacccgtag cggcacggca 120

tggcgggccac ggcgtactcc gtggcgctcc tcggcgggcg acgcctgccg gccgccttcc 180
 tccctcgacg cagcagcgtg tgccaccacc agcttcgcct ccaagacgca ccgaggctga 240
 tctccctgca ccgtgccagg gccgcttccg aggacacgtc ggcctccggc ggcgacgagc 300
 tcatcgaaga cctcaaggca aagtgggacg ccgttgagga caagcccacc gtcctcctgt 360
 acggcgggcg cgccg 375

<210> 7354
 <211> 351
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-B12

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 tgattgtggc ggccgtcttg ctttcaattc tcgcgttcct ttcaaggatt gctgcatcac 180
 tgcattgtga cttcttctaa gtctcactct gccggttacg ggtgctcctc tacgtcgcgg 240
 tctatgaacc catgtgcctc acgtatgaca tggggaggat gcttttcctc atcaggctaa 300
 cctttgttgg cgttgtgatg ctagaccgca ttggttcatt cttttgactt t 351

<210> 7355
 <211> 87
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-H3

<400> 7355
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 gactactgat tgacacgtct cctgatg 87

<210> 7356
 <211> 359
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-H4

<400> 7356

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ccaaaagatt tgaagatata ttcggacttc ggaaattaga gctgcgcaaa taagcatgga 120
agacttttgt gcagtttgc tcaaagaggct ggaatgggtg gcctataggt catgccggca 180
tcgccaactg tgctccacaa gcatcgtccg cctccgtttc gtgatgggag acaacaagtg 240
ttgcaactgc aagaacgtct gccatcctc cttgtcacca gagccacggg taaatccact 300
agagtgatca cggattttct cgtgtgaccc gctggggtaa atgagggcaa agctgggga 359

<210> 7357

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-H5

<400> 7357

ggatggcagg cgaagaaggc gaacgcaatg aggttcacat aaactgtgaa accaaagaag 60
tttccattca tataaaatct gaagattgtg atgcagcaag ccattggcaa acagaccatg 120
aaacggtgag gctggggtct tcccacaata catccgatgg cataactatg agcgaaaacc 180
aagacagcag taacataaaa tcatccaaca aaagggtcac aattcacaca taccctcata 240
atgcagcagg ttcttttagta cagaacggga agcttatcaa cctgcctggg tcaactggag 300
agatcttcga aattggatgc cagaagtctc cgggtctccg ccctacaaaa ctggtcagt 360
gagactatgc tgagatagat gacattagt ttatacgtga tgggtgaac 408

<210> 7358

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-H8

<400> 7358

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ccgagcaggg cggcgcagcc ggggagggcg ctggcagcga cccctctgag cctgcgcctg 120
cgactgcccc ggcgcgagcc ccagcgtctg ctgcggacgc ggccgggcag aggtccctgc 180

cgacgccgtt cctgaccaag acgtaccagc tgggtggacga cccggcggtg gacgacgtga 240
tctcgtggaa cgaggacggc tcgacgttcg tgggtgtggcg gccggcggag tttgcgcgcg 300
acctcctccc caagtatttc aagcacaata acttctccag ctttgtgcgg cagctcaaca 360
cctacggatt taggaagatg gtgcccgacc ggtgggagtt cgccaacgac t 411

<210> 7359

<211> 337

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-A1

<400> 7359

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taagctagtc gatcgatcca agagaagaag aagcagcaga caggaatggc gtcgctctcg 120
atgacgacga gcgcagcggc ccgcgcgcag tggacgccta ggcagaacaa gctgttcgag 180
caggcgctgg cgggtgtacga caaggacacg cccgaccgct ggcacaacat cgctgcgcc 240
gtcggcggcg ggaagtccgc ggacgacgtc aggcgctact acgagctgct ggaggaggac 300
gtcggccaca tcgagtccgg caaggtgccc ttccccg 337

<210> 7360

<211> 375

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-A2

<400> 7360

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aaacatgcgt gagctttata gattggttct agtcgataca ccactggccc cttacttctc 120
agagtgcatt acatctgagg atttgatga catgaatatt gagattatga ggaacactct 180
ctacaaagca tatcttgagg acttctacaa attttgccag aaactagggtg gtgcaacagc 240
tgagatcatg tgtgatctcc ttccatttga agctgacaga agagctgtta acattacaat 300
aatagttatt ggtactgagt tgacaagaga tgaccgcagg aagctgtact ccaactttgg 360
tttattgtat ccata 375

<210> 7361
<211> 365
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-A3

<400> 7361

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cggtaaaact tttaccgacc gaccgttggt ttaccgactt atcttctgtc gctaaaagaa 120
aagttttacc gacgcttcat catttggtaa taatagtatt accgactctc taagagttgc 180
agctgccacg atgtaccgac ccattctctg tcgctaaaag agacatttta tcaacgcttc 240
atcagttggt aataatagta ttaccgactc tctaagagtc actaattgtg tagattaccg 300
accaacaatt cggtgccgca gatattacca accaacaatc cattgcattc atacaaatag 360
ataat 365

<210> 7362
<211> 176
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-A4

<400> 7362

gaactcccca acaatcctga actaactggg tctgcctcaa cggtgacatc aacaattata 60
atacaacaat tggtggcaac aactgaaaaa tatggaatgg tcccttcgcc taacctgtgt 120
taaacaaaac tctgttaaga actgaatcct gaaactggtg caacaacttt aaccct 176

<210> 7363
<211> 214
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-A5

<400> 7363

ctgggctcga ttacgtttca tgctccctt tcaaggttcc gattgctaag ctagctgcag 60
ctcaggtgct tgtctgaggc tgctcctcc ttggcaaccg gattgcctgc tgctgatgga 120

tgtggtgata aacagtatta ttacaaagcc atgctatgtg aacattacta gtagcagtgc 180
tcataaaaagc tacaatccca tctccctttt tttt 214

<210> 7364
<211> 387
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-A6

<400> 7364

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ctgagtcctg attaggggtc tacataatcg cttctctttg cctgattgat ttgataccct 120
acatccgtgg tcgccggttg ttccggatta gcgggatctg ttgggtctccg gttcgtgtgt 180
gctgtaccgg atttggggta tggtcgagtt gcttggtaga tttacgttgg tacatacggg 240
tgcacagaag atctggattt actgagtagt aggctagtag ctgcctacgg cgtacacatg 300
acttgtgtat gaatcgtgta tctggcgtgt cgatgcttag tacgcgtagt gctgcaccat 360
actgaaaactg aatggacatt ggctgtg 387

<210> 7365
<211> 355
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-A8

<400> 7365

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gttgacacca tgggcaacta taggggaagg ggactgaacc tagtgatgaa ggattgtaca 120
tgattgcatg aataatgtat agcatccagt gttacatata aacgaactac tcatcatacg 180
tgatctacca caaaatcctg ctctagccta agaccattgg gacagatttc tcccgaagtt 240
cattgatgaa gaatgttcag catacaaagc ctcaatctac agagaagaaa tcgtacacac 300
cctttccaac gcctcaacag cctaacgata atgatcttga tcttgataac ggtga 355

<210> 7366
<211> 143

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-017-Q1-E1-B1

 <400> 7366

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 tttttttttt tttttttttt tttattattt ttttatcttt ggctgcatct caagacgaga 120
 taacgggagg cgcgcccaaa ggg 143

<210> 7367
 <211> 370
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-016-Q1-E1-E6

 <400> 7367

 accacgcgtc cgcggacgcg tgggctcgtg attcgtgaac ggcgggcgaca agaagccggg 60
 agagatgccg ctggccacaa ctgctccgac gccggcgccg ccctgtcctc cgccgagtcc 120
 agcagcggca ccaatccgga cgcagctccg ctctctcgtc gcgaagctcg cgctcacggc 180
 cgcgctcgtg tgccgctctg gcggtctcgc tgccatcgtc gtcgttcggg ccgccgctca 240
 ggccgtcccg ttggtccgtc ctctctctcc tctctgcaa ggaaggccct tcgcctcctc 300
 cactccttac gcgcagtctc agaatctgca gcttggcctc gacaagctcg gaaagatcat 360
 gccatgcccg 370

<210> 7368
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-016-Q1-E1-E7

 <400> 7368

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 aatattttgc ctcttatgct tccttgggtct ttctgcaagt gctgctacgg cgaccatttt 120
 cccacaatgc tcagaagctc ctatagcttc ccttcttccc ccgtacctct caccagcggg 180
 gtcttcggta tgtgaaaacc caattcttca accctatagg atccaacagg caatcgcagc 240

tggcatctta cctttatcac ccttggtcct ccaacaatca tcagccctat tacagcagtt 300
 acctttggtg catttattgg cacaaaacat cagggcacaa caactacaac aacttggtgct 360
 agcatacctt gctgcctact ctcagcaaca acagtttctt ccattcaacc aac 413

<210> 7369

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-E8

<400> 7369

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 cactggagat ggacgtgtta tctgggtcgaa attgggtgcca tctcttcgtg cctccagatg 120
 tgggtggagtc ccttggtgcat taaggatata ccaatggcag gtcccgcac acagtgtcat 180
 gcgtgaaaat ccatctgtac ttgttggttg caaatttgga gcagaacctt caattcctgg 240
 tgtattctct attcttgatt catattctgg agaagaactg aactctatga aacttgacca 300
 ttctgttgtc caaattattc ccttgacact gaaggattca tcagagcaac aacttcatct 360
 gtttggtgat tccgattcca atgcacattt atatccgaaa tctccagatg ctctc 415

<210> 7370

<211> 256

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-F2

<400> 7370

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 tagttcgtcc aatcgtgacc gtgacgcagg acgctatcaa ctatccatga catgaataat 120
 attggcggcc tctacggtgg caacgcgctc tgtcacggtg acgacagcta tcttcgctgc 180
 agctgtagcc acagacggca ccgacgtgct gatcatcgct cccaagacgg ctggcgccgg 240
 gcgcacatc tggttc 256

<210> 7371

<211> 407

<212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-016-Q1-E1-F5

 <400> 7371

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 gaccaggccg ccatacctcaa ggtgaaggag atcaagaacg gccggctggc catgttctcc 120
 atgttcgcct tcgtcatcca ggcctacgtc accggcgaag gcccctgga gaacctcgcc 180
 aagcacctca gcgacccctt cggcaacaac ctgctcaccg tcatctccgg cgccgccgag 240
 aggacgccta gcctgtaagg acggacgcca cgccgccgag caatgccaag tcatgcgctg 300
 ctgcatgccg tctttgattt taccgggata aaaagctgta tgtgagggtc tgaagaatgt 360
 gcaatgcca cgcggtgtaa ttatcgagag gggaacana ccttttc 407

<210> 7372
 <211> 395
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-016-Q1-E1-F7

 <400> 7372

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 ccggcgccctc cctggccagc cgccggcgt tctccaccag cttcacgcgg ggcagccggg 120
 tgtcggcgag gaacccctg atgagcagga acctggagag gaatggcagg atcacctgca 180
 tgacgtttcc ccgggactgg ctgcggaggg acctgagcgt catcggcttc gggtcatcg 240
 gctggatggg gccgttcaac gtcccggcca tcaacgggaa cagcctcacg gggtctttct 300
 tccccagcat cggccaggag ctggcccaact tccccagcc ccgcccgtc acctccagtg 360
 tctggctgtg gccagtgacg tggcacctgg gcctg 395

<210> 7373
 <211> 348
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-016-Q1-E1-G5

<400> 7373

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gatgtcttgc aactgcggat caagctgcgg ctgcggctca agctgcaagt gcgggtaata 120
tatatgataa tatataagtg caccgtgcat gattaatttc tccagccttc ttcttgtcta 180
gttaatttcc atttatttat tttttccatt gcaaaacaaa caaacaaaca gacaagaaca 240
aagttaattt ggatcgagta gttcaatcca tttgcgcgct gtccttttca gcaagaagta 300
ccctgacctg gaggagacga gcaccgccgc gcaggccacc gtcgtcct 348

<210> 7374

<211> 354

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-G6

<400> 7374

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gtcttgcaac tgcggatcaa gctgctgctg cggctcaagc tgcaagtgcg ggtaatatat 120
atgataatag tgcactggac cgtgcatgag gaatttctcc agccttcttc ttgtctagtt 180
aatttccatt tatttatttt ttccattgca aaacacacac acaaacagac aataacaaac 240
ttaatttgga tcgaatagtt caatccattt gcgcgctgct cttttcagca agaagtaccc 300
tgacctgtag gagacgagca ccgccgcgca ggccaccgtc gtcctcgggt tggc 354

<210> 7375

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-G7

<400> 7375

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ttgtgttcga tggcaacacc caggctcgtga aggcaatcga gaacgcgac cccgtgcggc 120
acgcgctgcc cgccgccgcc gccgcggaga tcgacccgcg gtgggaggag gagctgaggg 180
ccatggaggc ggagaaggcg gagatcgacc gggcgggcgc ggcgcggtg cggcgggagc 240

tgtggtgctg gctgacgtac ctggtgatcc agacggccgg gttcatgcgg ctcaccttct 300
 gggagctgtc gtgggacgtg atggagccca tctgcttcta cgtcacgtcc atgtacttca 360
 tggccggcta ccccttcttc ctccgcacca agaaggagcc gtcg 404

<210> 7376

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-G8

<400> 7376

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 cccggctgcg cgcgtttccc gctggccgct gctatccgat ttcttgattc ggtcgctctg 120
 tctcgtcaag gcgtgcaccg ccttccatgt tgtttgttca aaatttctgc ttctgcaact 180
 ctctttgctt gttctgtgaa aacatagggt ccatttcaac ttccgtcgga caggacctgt 240
 attcgtcgag aaaaagtccc tttttcatag acgaactttg cagcactgtt tcttatatag 300
 agatttaagt cgatagatgg taaaaggcca tgggagacat acagtttact gggaaaacca 360
 gtttccattc agctgttttt ctctccctaa ttttgatttg 400

<210> 7377

<211> 123

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-C5

<400> 7377

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 atagcaaaag ccctactgt ttagtattaa ttatcaataa atttgtttgg gacggttgaa 120
 ttg 123

<210> 7378

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-C6

<400> 7378

accacgagt ccgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaaaaaa aaaaaaaaaa ataaaaaaaa taaataaaaa taaaaaaaaa aaaaaaaaaa 120
aataaaaaaa aaaaaaaaaa aacaaaaaag gcgcggcccc taaaaagttt ccaactttat 180
ttacccttta ttccaatttc aaactccttc aaaattttcc ctaaatttca ttccatggcc 240
cttcttttta aaacttctta cttggaaaac ccctgccttt ccctttttta acccctttgc 300
aaaaaatccc cttttcccaa tctggctttt taccaaaaag ccctccccct tttccccctc 360
caaaaatttc cccaccttaa atgcaaattg gaaccccccc tt 402

<210> 7379

<211> 378

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-C7

<400> 7379

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cggcaccaat ggcttactac caggaggtgg actactgctc ggaggaggtg aggtcgggtg 120
ccccggccgg ctteggccgc cacggcgggc gcgtccagca gcacgtcgtc aaggagaagt 180
tcgaggaggt cgacacggtc tcacgcgccg gcgccaacca ccaccaccac catggtcacc 240
acggcgccca cggtctcgtg gtgcgcgaga ccagggtcga agaggacatc aacacctgca 300
ccggcgaggt ccacgagcgc agggagagct tcctcgccag ggctaactga gccgcccggc 360
ggccggcatc cagccccg 378

<210> 7380

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-C8

<400> 7380

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gaggccagag ccgaggtccg gcatacaccc catggtgttc gtgctgttcc ggcagctcgg 120

caggggggacg gtgtttgcac cagacatgcg gcacaacttc aactgcaaga gcttcgccccg 180
 tcagtaccac ctggacgtcg tggctgccac gtatttcaac tgccaaaggg aggcaggatc 240
 cggggggcaga aggttcaggc cggagagctc gtaaggaatg aagcatgcac agaagaagac 300
 tgcagcgctt tcgtatgcat atgatctatc gtcgtcctgc ggaatatata tataagtaacc 360
 gttgttatat ggaataatgt gcatgaaatt ggtatcagat gcaccgaccc gtacgtacgt 420

<210> 7381
 <211> 396
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-D5

<400> 7381

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 atccactgaa acatgtgggt tttgataaca gcggatctca taagttcagt gtaagatgtg 120
 aatcacagcc tcaggcttct gaaagttcca gggatgtttg taattcagat caaagatgtg 180
 caaatggtgg gagaaatcaa actacttcct gtgctagtag tcttatggta aataaacaaa 240
 attgttactc agaaaatgat gaaggctcca ggcattgatg agagctgatg acgaactctg 300
 ctagttctga tagcacctcg tcatgcatga gccagggaga tagggaaagc agctccagca 360
 gtacaacctc ttcgagcgct caaaatccgg aatcat 396

<210> 7382
 <211> 314
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-D6

<400> 7382

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 aaatacaaaa aaaaaaaaaa atttatgata aaaaaaaaaa tacataagtt cactctacta 120
 tgtgaatcac aactgacgc cttctgaaaa ttcccgatcat gttttagtag catatcagtg 180
 acatcccaat gctggcacac atcatactac ttctgtact actattctta tcgtcattgc 240
 actcaattgt tactcagata catgattaac gctccatcca ttatctatag ctgatccacg 300

atttctgcaa actt

314

<210> 7383

<211> 398

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-D7

<400> 7383

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tgctccacag ctgcctccgt gtccgtgggtc agaacaggat cgcgagacct ctccccctcc 120

ttttccttca cagccgcggc gctccccctcg gcgcgtctga ggccggtagg agcgtgggtc 180

cgcgggtggag ggtacacctg caggctccgc gccgtccgcg ccatgggctc cgcgccgtcg 240

togtcccaat ccccgctcgt gcacacgcct tcaggacaaa cccaaggga agcagattat 300

aaatcactga gtgaagagga gtggaagaag cgcctgactg aagagcagta ttatgttact 360

cggcagaagg gcactgaaag agcactcact ggggaata 398

<210> 7384

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-D8

<400> 7384

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ccaccactgc catgcattaa cctcaaccct tccgcaaact attcactgtc actttgtcat 120

cggcgtccca tcgttcactc aaatgtgggtc tccgatacct ggcaccctca tgaggactag 180

ttcactccct gctgtcattg aggtttctgg caatgatgac tggaagaaac gaaaggaagc 240

acagagcctg aagaggctcg aggttaagaa gaagaggatt gagaggagga actctctcgc 300

ctgcaacact tcaaaagaag ctgctgggca gagtccaaaa gagatgaatg caaacactga 360

caaattagta agttctgatg aaactattgt cagcgctaac gaaagtcata gcagtggcaa 420

gcactctggtg 430

<210> 7385

<211> 386
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-016-Q1-E1-E1

 <400> 7385

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 caggcgccac ttcctccgcy caaccaccag acgccagtcc accaccgctt cccgtgcagc 180
 gccctccctc tacgttcccc catttcctgt gttggcggcg atggcgcggc acttcgtgct 240
 caacaccggc gccaaatcc cctccgtggg gtcggcacc tggcagtctg accccggcgt 300
 cgttggcaac gctgtctacg ccgccgtcaa agcgggttac cgacatatcg attgtgccag 360
 agtttacggc aacgaaaaag agattg 386

<210> 7386
 <211> 417
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-016-Q1-E1-E2

 <400> 7386

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 cgttttttagt gcagcggaca cggttgcagt gtcacagcag tcgccggcaa gtggtcatcg 120
 tctggttgtc attcatgacg aaacgaccat catggctcca cctgttcagg tcgtggttgt 180
 gcaggtggag gacaagtgca gtgttggtcg tcacggggag acgagcggtt cttcttcttc 240
 ttctatttcg tcatcggcga gcgaggaaga ggacgtgtcc tttttggagt cgaaccgaga 300
 aatgctggaa gatgatgctg atcgtagtac gtcctctgat gggagctgga gagtggagaa 360
 agtgaagaga ctgatcaaca tggtcaccct ggtgtctctg ctcattcttt tgtacac 417

<210> 7387
 <211> 365
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-016-Q1-E1-E3

<400> 7387

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cccatcaatt ctgtagcctt ctgggccagt cgaggagag cccgctgagt gttgcagtgt 120
cagctggttt tcaaggacta ccaactctgc tgaagctgac gcaagtcatt gctgcgaaga 180
agcaggagtg gcaagttatg aagcagcttc ctgtcccat agacatcggg ccagaattcc 240
agtatcattc tgtctttgtg tgcccgggtg tcaaggagca gtccagtac gagaatcccc 300
aatgcggatg ccttgtggac atgttgtctc caagcagtc atcatgaagc tgtcgaaaag 360
cagct 365

<210> 7388

<211> 216

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-H4

<400> 7388

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ccttgaatc cttcggcgga acccctttct ccattcggcc ttcggcgcg cggggttttt 120
ccctttccga aaaggcaagc ttcaatcccg gccgggggtg cttccccggc gattgggcgg 180
gaacgccggc caaccaaacc cttcttggcc ggcggc 216

<210> 7389

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-H5

<400> 7389

cccacgcgtc cgcccacgcg tccgcggacg cgtgggaaaa aaaaaaaaa ataaaataaa 60
aaaagaaaag aataaagaaa ttggaaaaga aaagtaaaaa aagaaaaaga aaaatgtaaa 120
ataaagtaaa aatgaaataa aaaatTTTTT tcaaaaaaaaa aaaggggtgg ccgccccaaa 180
ggttcgaggt taacttaagc ggataggcaa tttcatactc cttcaaagg gtccctaaat 240
ttaatttcag gggccttctt ttaaaaactt ctgaagggga aaaaccgggt ttttaccag 300

ttaaaccctt ttgaaaaaaa tcccccttttc ccaacggggg ttaaacccaa aaagg 355

<210> 7390

<211> 332

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-H8

<400> 7390

agaggccaaa acccgcgac accggcgacg gcaggagaac ctcccgccgg ccgcccgcct 60

gccgcccgcct ctacaggccc accgcctact catctcccac cgccgcctac ccaactccagc 120

tcgcccgcgg ttcaccggcg cctcttccgt ccaatccgct cccgccacaa ccttggtccc 180

gggccccgcc acatcctcca tctctccat ccgcgagtcg ctctctcag gcgagaggac 240

cgcgggcgac atcacctccg agtacctctc ccgcctccgc cgtaccgagc cgaccttgcg 300

cagcttcac cagtcgcgg acgcgcgcgc cg 332

<210> 7391

<211> 198

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-A1

<400> 7391

aagagtctcg aatctgaaat cgatcgtgtt gtatatgttc cagcatcgca acgacgtaaa 60

atggttcaag gcaaagtatt atgcgtgcc ttgacatagc caatttaacc aatttcgaag 120

caacgacaat gttatttttg cagcctaatt agcgggtggaa aaaacatggt cctcgtggcc 180

gcatcatgga aaacgttg 198

<210> 7392

<211> 303

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-A2

<400> 7392

cacgcgtccg accacgcgtc cggtcacaac tgaagaagtg tctcaggtac ctgaagagca 60

gctaccaata gaggatctta gtgttcaaga tgacctgact tatgctgagt atcccataaa 120
gattcttgat aactgactc ctgtcacgag aaataagggt ataaagatgt gcaaagtgc 180
attgcgtcac tatggcgaag aagaagatac ttggaagaga gaagaagagc ttcgcataga 240
ctttcccat cttttcccta gatcttctta aatctcgagg acgagattat ttttaagggg 300
ggt 303

<210> 7393
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-A3

<400> 7393

ggacgcgtcc gattaaaact ggtgttaagg attataaatt gacttactac accccggagt 60
acgaaaccaa ggatactgat atcttggcag cattccgagt aactcctcag ctcggggttc 120
cgcctgaaga agcaggagct gcagtagcgg cggaatcttc tactgggtaca tggacaactg 180
tttggactga tggacttacc agtcttgatc gttacaaagg acgatgctat cacatcgagc 240
ccgttctctg ggaccagat caatatatct gttatgtagc ttatccatta gacctatttg 300
aagaggggtc tgttactaac atgtttactt ccattgtggg taacgtatgt ggtttcaaag 360
ccttacgcgc tctacgtttg gaggatcaac gaattcccc tgcttattca aaaac 415

<210> 7394
<211> 304
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-A5

<400> 7394

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cgcttctgct tgcggagttg cgggtggagat ttgaggcctg cggcgacgat ggcacctgcg 120
gaatccgggg agaatgogac cagcttcgcc atggcctgca gcctgctcag ccgctacgtc 180
aggcagaacg gtgccgcggc tgccgatctc ggcctcgcta tcagagctga atccgatgca 240
aagaggacgt cgacggacat ggaaaagggg gaaaccggga aggagaccat ggatctcttc 300

cccc

304

<210> 7395
<211> 404
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-016-Q1-E1-A8

<400> 7395

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tgccctgccta cggtatgagc tgagaaacaa ggatgccccca tcagggaaga ctgttgcacg 120
agatcttagc aagagcctga gcccacagtc tgaattgaag gccaaacagc tgataatgga 180
atatgccaat gtgggtgcgg aggacagtca cttggggcat gtcgaattcg gttcagagtg 240
ctcttctca cgggcttcgt caggtgaacc ggatgatgtg tccattgaaa ntgcttcaat 300
gacaaaacat actaataaaa aacccaaaaa gaaaaagttc ttctctaagc ttcggaaact 360
ggtgctggga aaagggaag agaancgtga aatttctact ctgg 404

<210> 7396
<211> 374
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-B5

<400> 7396

accacgcgtc cgcggacgcg tgggtggatg cagaaacaac ggtgggtatgt tgctgacaac 60
ggcatctact ccaagttaat atctgtgatg ggaaggaaag ggcagatacg gatggcaatg 120
tggctgttct ctcagatgcg gaacagcggg tgcaagcctg acacttctgt atataactcc 180
cttatcggcg cacatctgca ttcacgagac aagagtaagg ctttggccaa agctctcggc 240
tattttgaga agatgaagtg tatagagaga tgccagccga ctattgtgac atacaacatt 300
ctgctaaggg cttttgcaca ggctggtgac acaaagcagg tagacatggt gttcaaggat 360
ctggatgaaa gtgt 374

<210> 7397
<211> 264

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-016-Q1-E1-B6

 <400> 7397

 ggcatccata tcctttcgca tcagtactgg gagtggcaca cgcaccgcac acatactact 60
 agtatgtagt ggagtgcttg aaaggcataa gcgaattttc ttcttgtttg gtctacgtcc 120
 atttgcttgt ccaggtaacc ggctagttta ctctgctttt tgggttttcc acgtctctct 180
 acaattgtga ctgttgacca cctataattg tgactgttga ccacctatag atgcgggttca 240
 gctagccctc cgacccccct ctcg 264

<210> 7398
 <211> 387
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-016-Q1-E1-B7

 <400> 7398

 atcgtctcca tgccgtgcaa gccgaggttc tacttcttgc cagtggtaag gacaatcttc 60
 taccaagcgg agaagaagcg gatcgactct tcaaggcact gaaaaactgc agagttcgat 120
 acttcaagga caatggccat acactactgc tggaggatgg cgtcaacctg ttaactgtca 180
 taaaaggagc gaacatgtat cggcgtggaa ggcaaaggga ttctgtaacc gattatctca 240
 cgctactct aagtgaattc aggcaaacat ttgatgtgga tcacaggctg ttccaccttg 300
 cactgagccc agtcatgatg tccacctga aggatgggaa aatcgtcgcg gggcttgccg 360
 gtgtccctga caaaggcccg gtcttgt 387

<210> 7399
 <211> 376
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-015-Q1-E1-H3

 <400> 7399

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ggccccggcg gcggcaacaa cggcggttct cgcgcgttgc cgggcgcctt ccttccccgga 120
caacaacggc acaacttccc ccccttcggc ttcccggtcc ggcccaaccc ggccggccgg 180
gtccccaacg ggcccttccc cctgggtcccc gcgcccgtct cgggtgccgg tccccccagg 240
atccgggggtc ctgacttcgg gggcttcccc gtgccacggc tgccgctgct cgctgtgtct 300
ctgtntcttg gggttttgca gtgactcgct cgcggttgct gccctggtgg actggatgta 360
tatctaccg tagctg 376

<210> 7400

<211> 376

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-E6

<400> 7400

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gggcgatgct gcgcgcggga gctaggcagc tccttgcccc ggggctccgg cggctcggtc 120
tgggcaccgg cgcgcgccgt cagggtgggc cggccgccgc ggccggggg atgagggcgt 180
accacgagcg ggtggtggac cactacaaca acccgcgga cgtcggttcc ttcgacaagg 240
aggaccccaa cgtcgggtact gggctggtcg gcgcgcgggc ctgcggcgac gtcataaagt 300
tgcagatccg cgtcgacgag gactccggta aaatcgtcga cgctgcttc aagacctttg 360
gctgccgctc cgccat 376

<210> 7401

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-E7

<400> 7401

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tagggttccg gcgatggcgc acggcggcta cccgcgccgc ggccgtgccg tacgcaggcc 120
caagtccctg gcctctgccg ctgttgccga ccgcaagcgg aagcggaccg ccgccgccgc 180
caagaccacc tccttaaga accagatccg ctccaccgag cgcttccctc gcaaggacct 240

tccggatgag attagggttg ctcaagagaa gaaactggaa gaactgaaga ggcaacaaga 300
gcttcagaat caacttggtg tccagcggac attacagttt agagatagaa agataaaatt 360

<210> 7402
<211> 373
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-E8

<400> 7402

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agcaccatgg ccctctcctc cacggccttc gccggcaagg ccgtgaacgt gccgtcgctcg 120
tccgccttcg gcgaggcccg cgtgacgatg cgcaagacgg cggcgaaggc caagccagcg 180
gcgggcgctcg ggagcccgtg gtacggcccc gaccgcgtgc tgtacctggg cccactgtcc 240
ggcgagccgc cgagctacct gacggggcgag ttcccgggcg actacggctg ggacaccgcg 300
gggctgtcgg cggacccgga gacgttcgcc aagaaccggg agctggaggt gatccactcc 360
cgctgggcca tgc 373

<210> 7403
<211> 373
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-F1

<400> 7403

accagttacc actcaccagt caccagtctc cactctggag tctggaactc ccctcatcct 60
ccacatctcc accgcacgag aactaggaag gcgaagccga aggcgcggcg cggcgcgaggca 120
cggatcgagc gatggcggtg gccctccta cggcgggcggc gctggagcag ctaagcagca 180
gcaagatgtt cgacggcttc aatctccgct tccgccacca gagcgccacc cttggctgcg 240
ccatgacttt ctccatctac ctgccccgt cccggcgctc caaccttccc gtgctgtact 300
ggctctcggg tctcacctgc accgacgaga atttcatcat aaagtccggc gcccgagcgcg 360
ccgcgcgtgc cca 373

<210> 7404

<211> 446
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-015-Q1-E1-F2

 <400> 7404

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 cggcctccgg ggctacgccg cgcccagggtc cgcggtggca gcgctgccgt ccgtgagggt 180
 gggcaggaag aggtcgtcgt cgcagggcat ccgctgcgac tacatcggct ccgccaccaa 240
 cctgatcatg gtgacgacga cgacgctgat gctgttcgcg gggcggttcg ggctggcgcc 300
 gtccgcgaac cgcaaggcga cggcggggct gaagctggag gcgcgcgact ccggcctgca 360
 gacgggtgac cccgcccggg tcaacctcgc caaaagcct ggctgcggg cgccttcggc 420
 cacatcctcg gcgtcggcat cgtgct 446

<210> 7405
 <211> 389
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-015-Q1-E1-F3

 <400> 7405

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 tgaaaacgtg aaaccttctc tgtggcctct tcgcgaaagc tgggctggat tacttntctt 120
 gctccccttt cagggttcga ttgctaggct anctgcagct caagtgcctt tctgaggctg 180
 cctctcatt ggcaaccgga ttgcctgctg ctggtggatg tggatgataa cagtattatt 240
 acagagccat gctatgtgaa cattactagt agcagtgtc ataaaagcta caatcccatg 300
 tccttttttt tccccagtca tgtaaaactt ccaaactgct ccatgggttc aaactctgtt 360
 cttcaatata tcataatta tcgattaaa 389

<210> 7406
 <211> 380
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-F4

<400> 7406

cccacgcgtc cgcagcagct ccgctcgtcg atcagctctc ggctgaccac tcaccgccag 60
tgggtgcctg ccgaccaggt ctgccaccg ccgccgccgc cgcggtagag aggggagggg 120
gagggagagg gagaaaaaac tggcccagat cgagaggtac agcacgaata agagaggcaa 180
gagagatagg ggaccggagg gcggcgggcc ggggcccaag accgaggggc tcgtgcgcag 240
gaagctgatg aggtcctgtg cgctcgtccc ctteggctgc cgtgctggac ccatcgacga 300
cgcgccgccg cccgtggacc acgctgccgc cgccgccgcg aggaggcgcc ggaggaagat 360
ggccaacaga gccgccaac 380

<210> 7407

<211> 378

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-F6

<400> 7407

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ttctcaagga tgtgtatgct cactgggttc ccgaggacag gtcctcacc accaacctgt 120
ggtccgctga gctetccaag ctgcgcgcca atgcgttctt ggcacagagg atctcctctg 180
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ccgtgggcaa ggacacgaga attggcccca agttcctgaa cgccagtgtt gggttcgggtg 300
gctcatgctt ccagaaggac atcctgaacc tgggtgtacat ctgcgagtgc aacggcctgc 360
ccgaggtggc caactact 378

<210> 7408

<211> 231

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-F7

<400> 7408

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ttgtcgtatc tgggctctaa agacacaacc ggaagaaaca ttgcacagaa ggtggtcgtc 120
acagatctta gagaagaaat ggttggtttac atcaagggat tccaattgt tttgagagaa 180
ctagatcaac ctgttgatac tttgaagcat gttggcatta ttggtccaat g 231

<210> 7409
<211> 243
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-015-Q1-E1-F8
<400> 7409

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ctcttgatag ccacttgga attaaaatac ggtctttata tagccacgct ggagatcaca 120
accggtcatt gcacgacgat gctcggcaac ataacggttc atcgcaggtc gatccgctgg 180
caattgatga ttagtcgcaa ttccgtcagc tacagcctcc atcaacatcg tagtcactgc 240
tgt 243

<210> 7410
<211> 367
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-015-Q1-E1-G1
<400> 7410

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gttgctcgag aaccccaatt gtctgaatgg actgaaagag tcagcagatg tgacagattg 180
aaatctccgg ttaggattgc aatgggttga aagtatactg gcctgtcaga ctctaccta 240
tctgttataa aggtctcttt gcatgcgtcc gttgctttgg acaggaaact tgtggtggac 300
tgggttcctt cccgtgatct tgaagattct acagcaaaag agactcctga cgcctatgaa 360
aaggcat 367

<210> 7411
<211> 339

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-015-Q1-E1-G3

 <400> 7411

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 aggagttcgt ggagatcggc gcgggagacc ttgtcgtctt cccaagggc atgagctgca 120
 cctgggacgt cgccgaagcc gtcgacaagc actacaactt cgagtagccg ccgccgccga 180
 ctagccctgc ggcgctcgat gtagacttgc tgtgctcttg tactctgaac ctatgatgct 240
 ccactccaga gttaacatac cgtgtaataa agctcccgat tacgggacta caatgctgta 300
 ctatctgttt cagattccgt tccgttagct gtgataaga 339

<210> 7412
 <211> 370
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-015-Q1-E1-G4

 <400> 7412

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 attgggtggg ttcagtttcc gaaaaaaaaat cccaagcca agccacaagt ttttgattcc 120
 aagttaaaaa gaagaagaaa ggtacctttg gatttgacca accaagtcaa gcatataata 180
 caaactgaac ttgttctatg gaactctgaa taaaaatcca agtctctact aacaagatct 240
 gtaaagctta tgaattaaga aacatgaaaa ggcctctagc tgagttgggt aggtagtttg 300
 aatagcactt cccaagtccc ccatgtgagc gaattttaggt ttgggggttaa aaaatcccct 360
 tgtctgtccc 370

<210> 7413
 <211> 222
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-015-Q1-E1-G6

 <400> 7413

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ctgggtcccaa gtcccaatta gtcggagcct cctgccctcc tcgaccgctc aagccaagaa 120
 ccagaagcca tggagacggc ggcgccggcg cccggcgccgt gggcggaat ggagatggac 180
 tgcattggtgc aagtgttcgt gcgcctcgac ctcgaggacc tg 222

<210> 7414

<211> 376

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-G7

<400> 7414

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 tatgtcgcgg acgtggtgc agccggtggg gcagaagcgc ctcaccaacg tggccgtggt 180
 gcggtcgcgc aagcacggcc agcgcttcga gatcgctgc ttcccaaaaa aaggtgctct 240
 cgtggcgctc ccgcgtcgag aaagacatcg acgaggtgct ccagtccac accgtctact 300
 ccaacgtctc caaaggcatc ctgcgcaact ccaaggaact cgccaatgcc ttcgggcacg 360
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<210> 7415

<211> 367

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-015-Q1-E1-H2

<400> 7415

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 ataagtaact tttgtatcac ggttaaataa tttttcctta attaaaaatt aatttcccca 180
 aatgaaaaga tttaaaaata aaatttttaa ttttaagtcca aaaaatatat aataaaaaata 240
 aaattggtaa aagccaatca attttcctaa aaccgggttt ttaaaaaatt aaattaaatt 300
 aaaaaataaa atttaattaa ttaaatttaa tactaatatt tattttaatt aaattacctg 360

aaggata 367

<210> 7416
<211> 301
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-E5

<400> 7416

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agaggccagc catgggcaag gaagggggcca gcgacagcgg catgtcggag tcggtgattc 120
gcaaggctct ggtctcgtac atgtacgtgg cgggtgtgat ctctctctcc ttctccgtga 180
tcgtctacaa caagtacatc ctgcacccca agatgtacaa ctggcccttc cccatctccc 240
tcaccatggt gcacatggcc ttctgtctct ccctcgccgt ggcgctcgtc cgcgttctcc 300
g 301

<210> 7417
<211> 366
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-C1

<400> 7417

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tctggatggc caagtcaag aaccacacgg cgcataacca gtcgttcaag gcgcacaaga 120
acggcatcaa gaagcccaag cgccaccgcc agacctccac caaggggatg gacccgaagt 180
ttctgaggaa cttgaggtac tcaaggaagg gcaacaagaa gagtggcgag gctgagtcgg 240
aggagtaaga tgatggtgat tgagtttgtg gcgacaaatg catctcttgt atcgctaaga 300
gtcttagctg tgaacttagt tctcatttct gtgtgactgt gatcaaagga cttgtgtatg 360
atcaaa 366

<210> 7418
<211> 364
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-C2

<400> 7418

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taaagcccta aaatatgtat aagaaaaaat gataaaataa ataaatagaa tatataaaag 120
tgttttggga tcatggaacc cttagagatt atctagtttt tttttctcta tgtgcatatt 180
taactaaatg aaaatctagt aaaactctct acaagctcta aattggagta cccttcaata 240
ataattttct tacatttgaa agtatattaaa attttaaaaa aaaataaatc ttaaaatcat 300
caaataaata atatgaatgt aaattatttg tttgaggag ttatccattt atgaattatg 360
catg 364

<210> 7419

<211> 393

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-015-Q1-E1-C6

<400> 7419

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ccttagtgag tgggaggaca ggatgactcg aggcttattc cgctacgatg tcaactgctg 120
tgagaccaag gtcattctcg gcaaccttgg gtttggtgca caactcaatg aagggcgcca 180
ccttaagaag cgccctactg agtttcgtgt ggaccgtgtg ctccagccgt ttgacctgc 240
caagttcaat ttcacaaaag ttggccagga agaggttctc ttccaatttg agaatagtgg 300
tggtgatgac agctatttcc tgaacaacgc tccaatcatt gctgttgatc gggctccaaa 360
tgttantgct atcaatgtaa gcccaattga ata 393

<210> 7420

<211> 381

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-C7

<400> 7420

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gtgccatcca accataagag acgaagttag caagcacttt gcaaactgcg agctacggtc 120
gatgggtgttg gttgacagaa gcatgcttgg gtcatatctg tcaagattca actatgctgg 180
caagaatcca accgggctag atgtgcctag tgatattgca gataagaagc aggttgatga 240
agctcagaag aactgaggca accttgaaag cataccgtag atgacttgga ttatcaaaaa 300
gccactctga cctttgcgaa gcttgcttgc ttgctttgaa gagggcatct actacagata 360
gagtttacac ataccattgc g 381

<210> 7421

<211> 173

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-C8

<400> 7421

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ttgtacaaag acatgtttct ttctgaaccc aaaagggaga aagatgtatg aagcgtgtat 120
ataagatctt agctagcagt ttgttttcat ttgtatgagc gatcgaaggc tgt 173

<210> 7422

<211> 384

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-D1

<400> 7422

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tgcagttcat ctatatcgat cactccagtg cttttgtttc attgtatgct tgcagccttg 120
cacttcaatt tttgcagtcc aaagttctat tctttacttg gatataattac tctcttaaaa 180
catcaattca ttgttttgca ttcctttgtt tatttgtaga tatgaacaag tcctttgttc 240
tttaatgggt ttgattttgc tggcttgaac tcttttaggtt tttgaactaa tgataacatg 300
tgtagacctg aaaattcgta gactattgta ctgaaccttc tgatgtttgt tcctttcttc 360
atgttgtagg ttgctgataa tttt 384

<210> 7423
<211> 377
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-015-Q1-E1-D4

<400> 7423

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cgcttcgaaa tcgttatcaa caacgacaac atccgaacgc tcgacctatc gccagtcgaa 120
gcagcactcg gcgacttgag ctcccttgaca ccagctgctt caagaaccct gctggaccag 180
accgtcgggt tcaccatcag ctacgagagg gaggacgagt acgacacgcg ggagctgtcg 240
gagttccccg acatacggct gtggttcgtg aggctcgacg ccgcgtaccc ttggttcccc 300
gtcgtgctcg actggagagc cggcgagctt gccagatacg ccgcgatgct cgtcnctcac 360
cagatgagca tgccgat 377

<210> 7424
<211> 272
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-D5

<400> 7424

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tactgtgagt tgttagacaa agcagatgaa tgtgaggatc catacatgcg tatggtttat 120
gcttctacat gggctgtttc ggtatacttc gcgtatcagc gcacatggaa gccttttaat 180
ccgatccttg gagagactta tgagatgggt aaccaccagg gcattacatt tcttgccgag 240
caggtaagcc atcatcccc aatgggtgct gc 272

<210> 7425
<211> 360
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-D6

<400> 7425

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 gccgcgcg ggccttcctt ggccactcta gccgcctcgg ccgcaccgcg tcgcccacga 120
 ggcgagcct caaggcggag gccaaaggcg agtggctccc cggccttccc tccccctect 180
 acctcgacgg cagcctggcg ggtgacaatg gcttcgaccc gttgggcctg gcggaggacc 240
 ccgagaacct gcggtgggtc gtgcaggcgg agctggtgaa cggccgggtg gccatgcttg 300
 gcgtggccgg gatgctcatc ccggagggtc tgaccaaagc cgggctgac aacgcgcgc 360

<210> 7426

<211> 368

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-D7

<400> 7426

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 agttagaaga agcaccagtg actgatcgat ggcggccag gctctcctct ccggccggca 120
 gctgctgggc cgcgccgtgc agtcggccgt ctctaggctg tcggcgagga aggcgccttc 180
 cgtcgtcagg gccagctcca gccctocagc caagcaaggc gccgacaggc agctgtggtt 240
 cgcgtccaag cagtccctct cctacctoga tggcacgctg cccggcgact atggcttoga 300
 cccgctgggc ctctcggacc cggagggcac cgggggcttc atcgagcca agtggctggc 360
 ctacggcg 368

<210> 7427

<211> 385

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-D8

<400> 7427

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 tcacctctct gtcgtaggaa gaatttactg ccctattact catcttatta actctaacaa 120
 aaaatctcac tttaagatag gtacatattt caatcttaat tctagattta tgtttcggtc 180
 tgtacatagt ggttccattt tttctcccct tgcctcgtc atatgaatat ttttactcca 240

ttgggttgttt tattttacttt aaaagcgtgc cataaaatat gtgtgtttca ctattaataaa 300
 atatatccct tcacttatgt attagtgtta gaattacaat tatttttttct tttcccaaaa 360
 gtttagaaat gttttaagcg aacta 385

<210> 7428
 <211> 399
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-015-Q1-E1-E3
 <400> 7428

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 cacagacgcc atggagggtta cacaaaacca caccctgacc gtgaccgggtt gggcgggcat 120
 gaacgagtcg gcccgcaagg tggagccctt cgtcttcaag agaagggaga acggccctga 180
 cgacgtgacg atcaaggtgc agtactgcgg catgtgccac acggacctgc acttcatcaa 240
 caacgactgg ggcattacca cgtaccgct ggtcccgagg cacgagatca cgggcgtggt 300
 caccaaggcc gggcgcaacg tgacgggctt ccgcgtcggc gaccgcgtcg gcgtgggctg 360
 catcgccgcc tcctgcctgg actgcgaccg ctgccgccg 399

<210> 7429
 <211> 383
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-015-Q1-E1-E4
 <400> 7429

cccacgcgtc cgggtcactg tgtgacctgt acgagaccct tgccatcacc cagagtgtca 60
 tctttgtcaa caccgcgcgc aaggtggact ggctcactga caagatgagg agcagggacc 120
 aactgtttc tgccactcat ggtgacatgg accagaacac tagagacatc atcatgaggg 180
 agttccggtc tggctcctcc cgtgtgtcga tcaccaccga cctgcttgcg cgtgggtattg 240
 atgttcagca ggtgtccctg gtcattcaact atgatctccc caccagcca gagaattacc 300
 tgcacgcgat tggtcgtagt ggtcgtttcg gtaggaaggg tgttgccatc aactttgtga 360
 cccgcgacga cgagcggatg ctg 383

<210> 7430
 <211> 388
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-015-Q1-E1-B8

 <400> 7430

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gtcatgggtc gttaattgat catgtgatgc ggacgacaag agccgagttg atcccaaat   180
gatgctggtg aacgaacctg aagcttggat gatctggtca agtaccagga tgagagatgc  240
tccccaaagag gacgtcatct aacaacactg acttatgtta tcccagggtta taattttggt  300
ctgttggtga tggtgctaag tgccggtggg ctccgcttc ttataaaagt atatcccatc  360
tttagcttct ttattgagga ctgtcact                                     388
  
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<210> 7431
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-014-Q1-E1-H5

 <400> 7431

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ctcgcggcca ccgccgcgcg ggccaactcc ggcttcgcgg actccaaccc gatccgcccc  180
gtcaccgacc gcgcggcctc cgcgctcgag tccacggtct tcgccgcgct cggccgcacc  240
cgcgacgcgc tccgcttcgc acgctttgct gtgaggtagc gcaagagcta cgagagcgcg  300
gcggagggtc acaagcgggt taggatcttc tccgagagtc tccagctcgt ccgctccacc  360
aatcggaaaag gcctctcta ccgctcggc atcaaccgct tcgaggacat g          411
  
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<210> 7432
 <211> 375
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-H6

<400> 7432

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agcatggcag tgcacaggaa ccttctccga cttcgtgggt tctgcatgac acctactgaa 120
cggttgctgg tctaccata catggctaataa ggcagtgtgg catcacgttt acgagagcgc 180
caggcatctg aaccacctct taaatgggaa acaagaagac ggattgcact gggatctgca 240
agaggtcttt cttacttgca tgatcactgc gatcctaaga tcatccatcg ggatgtcaaa 300
gctgcaaata ttcttttggg tgaggagttt gaggcagtcg taggtgattt cgggcttgcc 360
aagcttatgg actac 375

<210> 7433

<211> 299

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-H7

<400> 7433

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aaaaaaaaaa aaaaaaaaaa aaaaaataaa aaaaaaaaaa aaaaaataaa aaaaaataaa 120
aaaaaaaaaa aaaagaaaaa gggtaaaaaa atttaatttt ttaggttaggt gggtttacia 180
aatagttttt ggtttttatt tggttttaata taaattttta atccttttga ttgtacttcg 240
gatttgctag taagtggtaa ttatttttta aaatttttgc tattgggaat taatcattt 299

<210> 7434

<211> 377

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-014-Q1-E1-H8

<400> 7434

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ttctgctctt tctccatat ccaagaacca aaggtagcta gctagccgcg actcgttggc 180

tagacgattc aagcagcagc gcaagatggg ggcgcgggtg gtgattgcgt cggccggggt 240
 gggcatgctg gccggcggtg cgatggccaa ccggtccctc gggaacgggc tcccggcggc 300
 ctccaagtgg gacgcgcgcc cgcgctgcgc cacgtgcggc ggctccggcc gcgtggagtg 360
 catctgcana cgctggt 377

<210> 7435
 <211> 370
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-H9

<400> 7435

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 cagcagtagc gtggcgaagg ggtcaccacc accagccttc cagttccagt gcagggcgctc 180
 gactttcgcg gcggacacca gcctccggct cgagctggac gagaaccccc aggcgatcat 240
 ctcgggggcg tggcccgga actgctccct cctcagctac gacgacctcc gcgcctacct 300
 cgagtcgcag gagacggcgg cccaggcaga cggtcagcag cgcggcggtg cgctcctgag 360
 cgagaccatg 370

<210> 7436
 <211> 402
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-B1

<400> 7436

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 ggctcaaggc ctggcccgtt tgatatagat atgaagttcc tagagccatt tggacgggaa 180
 ctacattcaa tgaaaaaatt catggacaaa tcgtgcagtg ttatggactc atctatggca 240
 aacaagtagg cacatggcac atcagttccg cccaatacag ctgttggtgt atccacctgc 300
 ttctgaagt tacaagacct gaaaaataga agagacattt ggagagaagc cacattcttt 360

tgcgatatctt gctcacgctc acctgacgaa caaaatatga ca 402

<210> 7437
<211> 385
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-B2

<400> 7437

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gcatctcgcc ctgccccgc cctcgatctt cggtcccaa tctcgctgc tgetgctccc 120
gcgcgcgcgc tgcgccgcc cgtctccct ctctaccgc cgcacatcg cggcgcgcgc 180
gaccaaggaa cccgagctcg ggcgcgcgcg atcgggggcc ggcgacggtg ccggagggag 240
cggcgcgcgc agcgaccga ggggaggagg gcaggaagga gacggggagg aagagaagat 300
ggggcagggc ctgtccatgt cgcagaaact caccctcgcc tacgccgcgc tcgtcggagc 360
tggtggtgta atgggatata tgaag 385

<210> 7438
<211> 453
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-B3

<400> 7438

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caaataaggg gtctttgcaa tttcaacaaa accaaattcc caaaattggt tccaaaacca 120
ggaggtccta aaccaaccct aaaaatgcc a tggaactaaa cttacctgg gaaaaagctc 180
aaaatttggt gccccctgct cccactgcaa aaccaactgt tgtgatgatt gaggactatg 240
aatgtgaaga atatgatgaa cccctgtct ttgcaaagag atcaattttt accatccgtg 300
caacaagggg acaagaccag tggattcaat gtgacgagtg ctcaaatgg cgccggttgc 360
ctcttaattgt tattgttgca accaaatgga catgcaacga caactcatgg gacaaaaaat 420
cctgtcctg ctctgccct gaaaatttaa ccc 453

<210> 7439
 <211> 368
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-015-Q1-E1-B5

 <400> 7439

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 cccggccggc ttcggccgcc acggcggcgg cgtccagcag cacgtcgtca aggagaagtt 180
 cgaggaggtc gacacggtct cacgcgccgg cgccaaccac caccaccacc atggtcacca 240
 cggcggccac ggcttcgtgg tgcgcgagac cagggtcgaa gaggacatca acacctgcac 300
 cggcgaggtc cacgagcgca gggagagctt cctcgccagg gctaactgag ccgcccggcg 360
 gccggcat 368

<210> 7440
 <211> 359
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-015-Q1-E1-B6

 <400> 7440

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 ttcgtcggcg gcctcgctg ggccacggac gaccactccc tccacaacgc cttcagcacc 180
 tacggcgagg tcctcgagtc caagatcatc ctcgatcggg agacgcagag gtcccgcggc 240
 ttcgggttcg tcaccttctc cacggaggag gcgatgcgga acgccatcga gggcatgaac 300
 ggcaaggagc tggacggccg caacatcacc gtcaacgagg ccagtcgcg cggcggccg 359

<210> 7441
 <211> 385
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-014-Q1-E1-H4

 <400> 7441

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 caattggcca tcttaccagg ttgagggagc tggatgtcag tttcaacgaa gttgagacta 180
 tacctgagaa catttgcttt gcagccagcc ttgtgaagtt gaatgtcagc aggaactttg 240
 ccgacttaag agccctgcca aaatcaatag gggaacttga gatgctagag gagctggaca 300
 tcagtagcaa ccagatacga gtgcttccag actcttttgg gcactctctca aagctacgtg 360
 tgtttcatgc tgatgaaact ccact 385

<210> 7442
 <211> 364
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-B7

<400> 7442

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 tccaccagca gcggcagcgt ctgctgcgc gtccggacgg ggcaggccgc caagaaggct 180
 gcgctgtccg tgtccgcgtc gtccacgctg gcggggcgct tcctcgcggc gctggcgctc 240
 tcgcccgaag ctgcgctggc ggacgtggcg gcggcggaag ccggcggtga cagccatggt 300
 cagctgctgc tcgtcatggt ggagcacgcc atctggtgag tgctattcaa catgctgcag 360
 tcgg 364

<210> 7443
 <211> 356
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-F9

<400> 7443

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 atatcggcct cagaatctga atgggttagaa atttctgagg aagaggatga tgatgatgat 120
 gatgatgaga ctgatgatga tgaatatgaa gagggggatg ctagccagac agatgaagat 180

gaagaagagt ctgatgaaga tgctgcaaag aacgtgtcca gtgctgtgtc tctgctgaag 240
 ggtgaaagta agaccatgcg tataaaagag aagcgtgctc ggatagaaca gatcagggtc 300
 atccttggcc tttctgattc tcaaagtact ccattgcctg gagaatcact gagaga 356

<210> 7444
 <211> 402
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-014-Q1-E1-G1
 <400> 7444

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 ctacacatff accggtggga aggcagttgg gtacaggaat ctctttggaa tcccgtggca 180
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 gcttacgata aagcaacctc cgtagatgtg ctgccgtcgg gttaagtgtg tccagtcatg 300
 ggtgatgtgg aaaatgctgt gtgctgcaga tacccttttt gttttttttc cttttgttca 360
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<210> 7445
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 <212> DNA
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 <223> Clone ID: LIB189-014-Q1-E1-G10
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 cgcgcagctg gtcgtttgtg gagcgtcctg gggtcttggc ggtctttgct ttcttgggtg 180
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 tggacatcat caagttctc atccgctatg cgctgagtgg gagggcatgg aacctcgctc 360
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agtgggcgca tgccc

435

<210> 7446

<211> 392

<212> DNA

<213> Zea mays

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<400> 7446

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ccgtcctcgt agctctgcca ctgggcaaag gtgaggcttg gacctttcgt ttaatttctc 180
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accgcagcgc acgaggagga ggatgaggaa gggcttgaac tcgaagccag caggatgcgg 300
tggccgtgct gcgaccagtg cggcatttgc accaggtcgc agccgccgat atgcgagtgc 360
agggacacgt cgacgaccgg ctgccacccg gc 392

<210> 7447

<211> 446

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-G3

<400> 7447

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tgtaccgcg gtccttgcca atggccgtgg ccctgggtat ctgctcgta aagcttgtgc 180
gcaacatcac gggcaacccc gaggtgcggg tgaccaagga gaagaaggcg gccggcgctc 240
tggacaacca cgacgagggc gagaggtag ccatgcacgg cctcaggaag ttcgtccgcg 300
ggaagaagcc cgagatcatg gcttccatca actccttctt cgccgaccct cccaaggacg 360
attaagctag attccgtcat ggatggatga gtatgtttta ccaatcatta actgccgggg 420
gcgccccttg attcgtagcc atcgtc 446

<210> 7448
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-014-Q1-E1-G5
 <400> 7448

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ccactaccgt ggcactgagt gctgcctttt ccggatgtcc atgcccaccc attgttcgtc  180
ggaatgcccc agcggtggtg ccatttgcca agaagaagag gaatgaatat atcgaagatc  240
cgccagatga ggaggtcgca gatgatttca ccgacgagtt ggaggaggac ttcgacgacg  300
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ttgaagatga ttttgagagt gatgatgaac aggatcttta tgctggagat ggaagtgtctg  420
g                                                                 421
  
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<210> 7449
 <211> 395
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-014-Q1-E1-G7
 <400> 7449

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ttcctgtgca cataagtgt aatgttagtt gaatctcgca tggtttttga ggcgtcgctt  120
aagcgttgag gcatacccta gatgctgcag gacgccacag ggtttttagtt atccaggcat  180
acccccagcg cctcaggatg ccgcaacgcc taaaaaacca aggaatcgca gcagcttggg  240
ctgaaaattt atatttgtgc ttaggatgat gcatctcgga taattggtgc tactgacagt  300
gactcaagaa accgaactgg tctactcaa aaggccatgt cattgccttc ttcgcctcat  360
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<210> 7450
 <211> 431
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-H10

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gtcgtctctg caactggata actagcacgcg aaaaccgtct ttacattgga tggttcgggtg 180
ttttgatgat ccctacctta ttgaccgcaa cttccgtatt tattatcgcc ttcacgtctg 240
ctcctccagt agatattgat ggtattcgtg agcctgtttc tggttcttta ctttatggaa 300
acaatattat ctctgggtgct attattccta cttctgcggc gatcggattg catttttacc 360
caatttggga agctgcatct gttgatgaat gggtatacaa tggcggtcct tatgagctaa 420
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<210> 7451

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-H11

<400> 7451

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cacgctcttc aagcttctct ttccagtcgc cctgtgccat ggtattggtc acatcactag 180
caatgtgtcc ttcgctgctg ttgcagtctc atttgtcac actatcaaag ctctggagcc 240
cttcttcagc gcagcggcta ctcaatttat ccttggacag caagttccct tctctctgtg 300
gctttctctt gccctgtgg tcaatggtgt ttcaatggca tcccttactg agctttcatt 360
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<210> 7452

<211> 369

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-H12

<400> 7452

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 tcgtgaatcg tgatgtctat tgggcacttg ttgctgacag aactgtgcac aatgttgatc 180
 caatttgatg gatgggtggtg gttctgttat ttactagtcg gtcaaaacac taaacgggtgg 240
 ccatcatggc tgtgtgatgt atcataactg ttcagtaa at ttgtgttctt ctgcccgag 300
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 ttgtcacgc 369

<210> 7453
 <211> 383
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-014-Q1-E1-H2
 <400> 7453

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 tacctgaatg ggtgaagcga ctgccagat taggttctt ctgcaattgt gtattgcctg 180
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<210> 7454
 <211> 394
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-014-Q1-E1-H3
 <400> 7454

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 aagttcgtgc gcaagcacac cgccccgggt gtgctctcca tggccaacgc cgggcccac 180

accaacggct cccagttctt catctgcacc gtcgcgaccc cttggctcga cggcaagcac 240
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 atctctctga tctggctccg tcggccgccc tcct 394

<210> 7455
 <211> 370
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-F8

<400> 7455

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 cacgtcctac tgaagagaaa gaagaccttc gtgacggtga cagactccag cgggaacaaa 180
 aagacgggtg cctccgcggg ctgcttgagg gacaggaaag gacgggtccg tctctccga 240
 tacgcttccg aagcggctgc ggagcaggtc ggacgggtcc ccaggaagat ggggttgagc 300
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<210> 7456
 <211> 388
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-E3

<400> 7456

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 ggcgccacga cggaggtggt cttcgcgga cctgacctgt acctcgacct cgacttcgag 180
 cgttccatgg acgaagtcaa gaccatcggc gtccagcata gcgggtcacc agagctcgac 240
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aggggcctgt agcgggatgc gcggctga

388

<210> 7457

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-E5

<400> 7457

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atagccatgc gtatgtgcgg gatatttaca aggagatgag ctttgtgaag ccctctatga 180

gaaacaacac atgttatgaa ctgaactgta gaggtgatac tgcataattgt gttacaaact 240

gctatcacat gtttcaactga tcagttgaga tgtaataat atatacatct gcgttaatca 300

tgtacagatt gacgcgatgc atatgttggt cctgcgaagt gtgatcaatt atgggtattga 360

cgtacgtacc tactgagtgt caaatgagc 389

<210> 7458

<211> 299

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-E7

<400> 7458

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tatgcataga ctgtcggttat ttattgacta ggcgatacca tttagaatag ccattgtgca 180

tgacatgggt aatctactac agacacacat agttaagcct tgctcagctg atcaactgcta 240

tggaatttct gtggagtcca gtttgggggg tcactcaag cagtgcctga catttaggc 299

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<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-E8

<400> 7459

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cgataattat tagtagatct atgagatatg ccgcctggaa gaggcgaggt aagctgcagc 180
atgtaaaaaa gagaaaaaag atgtgacatc ctagaggagg aggcctttgc catgatgggt 240
gcgctcgcat ggcaggccag gcaataataa aaagatgatt attgcgtgcc gggggaggag 300
atcgcacggg ggttgatggt tttggccccg ggttctctc cctcatcttg ttccgtgttc 360
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ac 422

<210> 7460

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-E9

<400> 7460

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cctaacaaga ggccgcaggc gagcccagtc caattagatg atgtgaaaaa tttttggcct 300
ttttttagtc tttggacatg ttatcaaatt aaggagggtc tgctagcacg atatccaaac 360
taagaaatac ccaatgaaaa ctgaaaaca 389

<210> 7461

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-F1

<400> 7461

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 ggggtgtccgt gccctccgac acggaatcct tcttcgtcaa tgtcggcgac gcgttgacgg 360
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<210> 7462
 <211> 370
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-014-Q1-E1-F11
 <400> 7462

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<210> 7463
 <211> 427
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-014-Q1-E1-F12
 <400> 7463

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 tggaacccat atggttgatt acagccaact tttactttct atgccctctt tgtagggttt 360
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<210> 7464
 <211> 206
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-F2

<400> 7464

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 cagggacgag gaatcccacc acatccccat tgatcaacta ctagccacgt cctcgagtcg 180
 acgatgatcc tcaatgggta gaccca 206

<210> 7465
 <211> 423
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-014-Q1-E1-F3

<400> 7465

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 gccgatctcc tgccccgtcc tgccctgtgg attatcgaca gcggcgccgg ataccacgga 300
 agagaaggaa gacaaggaag gggccgaaac taacttgctt gtgccggggc aaggacgaga 360
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cca

423

<210> 7466
<211> 393
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-F5

<400> 7466

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ggggccatgt cctaattgtg gtactgaaaa ctttccttc tttgggacta tactgtcagt 180
ctccagtggc ggtacaacaa acaaagtga atgtgcaaat tgcagtaccg agctggaata 240
tgactcaaaa tctcgggtga tcacacttcc agaagcatca aatgcataaa cataggaaca 300
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actgcgaagc ctgcaactac taaagtttgg tct 393

<210> 7467
<211> 408
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-014-Q1-E1-F7

<400> 7467

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caggggtgctg cgcgcgcgcg ggcacggcgc cgggatcctc gtgtccaggt tccccaaggg 180
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cgtcggcgcc aacgacgaca gctgatgac cggcccgca ttcgtttccc tttcccgccg 300
tgnacagctc cgatccgcct gtgtcaagcc gctaactcaa cctcggtac ctacctgctg 360
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<210> 7468
<211> 411

<212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-014-Q1-E1-C6

<400> 7468

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 gtgttggttt accagatggc caggctaaga gtagtactat tggaaaggga tttgtaaaga 180
 ttttggaactc aatctccgct cccccgctt ttgctggaga attcccagca atccaccgca 240
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<210> 7469
 <211> 399
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-014-Q1-E1-C9

<400> 7469

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 cccccggag tacgaaacca aggatactga tatcttggca gcattccgag taactcctca 180
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<210> 7470
 <211> 389
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-014-Q1-E1-D10

<400> 7470

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gcacgctggg catagggata agattgtaga cttccactgg aattcgtcag atccttggac 180

aattgtcagt gtctctgatg atggcgagag cactgggtga ggtggaacac tgcagatttg 240

gcgcatgagt gatttgatct accgcccaga ggatgaagtt cttgcagagc tggagaattt 300

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gcaatcctgt ggaaactgag taggtgatg 389

<210> 7471

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-D12

<400> 7471

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acgagtgtc caattgaaga gtgccgcaaa aaggtttggc tgggtggactc aaagggtttg 180

attgttgact ctcgtaaagg ctcccttcaa tcattcaaga aaccttgggc gcatgagcac 240

aagcccttga aaaccttgta tgatgctgtt cagtccatca cacgtacagt tctgatcggg 300

acatctggag ttggaagaac attcacaaaa gaaatcattg agggcatgtc ttcct 355

<210> 7472

<211> 348

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-D8

<400> 7472

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aaaaaaaaa ataaataaat taaataaaaa aaaaaaata aataataata ataaataaat 120

tttaaatatt tttttaattg aatgtgtttc tttttagttt tttatttttt gggaatattt 180

tctttttttt agccttattt tttttgtttt tgttttgtgt ttctttggct gtctttatat 240
 tttgtagttc tggataaatt gtctctttat attattttgt catatttttt gttttatggg 300
 atgtgttttt tttctgtatg ttttgcttgt tggatttgtt tttttatt 348

<210> 7473
 <211> 397
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-014-Q1-E1-D9
 <400> 7473

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 gtggcaatgg ctgccagcgc cctgcttgcc ggcggtgcc tggcccagga ggtgctgctg 180
 ggcgcaggcg acggcgggct cgtcttcgag ccagccagt tcaccgtcaa ggccggcgac 240
 accatcacat tcaagaacaa cgccggcttc ccgcacaacg tcgtcttcga cgaagacgag 300
 gtgccgagcg gcgtcgacgc caccaagatc tcgcaggang agtacctcaa cgcgccaggc 360
 gagacctact ccgttcacct caccgtgccg ggaacct 397

<210> 7474
 <211> 384
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-014-Q1-E1-E1
 <400> 7474

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 ggcggcgggc cggggcccaa gaccgagggg ctctgtcgca ggaagctgat gaggctcctg 120
 tcgtcgtcc ccttcggctg ccgtgctgga cccatcgacg acgcgccgcc gccctggac 180
 caccgcccg ccgcgaggag gcgcggagg aggagggcca acagggccgc ccagctgctg 240
 ggggctgctg cgggtgcgcc gcagcagtgg cggccctcgc tcggcgacat ctgcgaggag 300
 tacagcagca gcaccgacgc cgtcaaggtc aggaaggcgg cgtcctggga cctcgcccg 360
 gcgctgcccc gcgcgcacgg cggc 384

<210> 7475
<211> 390
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-E10

<400> 7475

caacactatc tgccagagaa agaacttgct atcccagatc ctcttctgca cttcatccag 60
tcccatgggtg ctgctcttac tattgatcaa agtggctcggg tcctcttagc tggcaatggg 120
gatgagatga gagacttgct ctcaattttc ctggcgttca acatgtcgag acgagaaaca 180
gggtggctgca aggctgcatt tcttgttcca tactttgaga ggaaaagacg ttctagggct 240
aacagccaag tatccaattt aaaattagca ggcacaactg ctgatgtttc aaaaagtact 300
gattttaatt caaaatcttt gtcaaagaag aaacataaag tgaaaaacat caaagaacgt 360
gactcgtatc agagaaacta catacatgct 390

<210> 7476
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-E11

<400> 7476

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tagtgcagag cttgaggtag gaatgttgga tcatcccat tctgttgctg ctgcttcaga 120
agaagtgaca gcagatgagg ataactgct tttagctact tcaaaccaaa ataatccaga 180
ggtaccacaa gttgaagaag tgccgaaagc agacaaggat aacctgctt cagctacttc 240
aaacaaaaac aatcaagagg tgccacaagt agaacaacat gttggcatca gcaactctta 300
ttcagagccg ttggaccttg caaagtacag ttcactctgca gaattggagg tgcttggtct 360
ggagaagcta aaaatagagc tgcaatctcg ccgattaaaa t 401

<210> 7477
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-E12

<400> 7477

cccacgcgtc cgccccaggt ggcggcagcg gcggcggggt agcatttgtg ctacgagggc 60
ttttgcaatg gcggcttcgg ggttcggcgg cggcgagggc ttccggctct cggccgcgcc 120
gggggcccgc ttactgaagc tgcacaaggg cgacatcacc ctctggtccg tcgactgcgc 180
caccgacgcc atcgttaatg ctgctaata gcaaatgtta ggtggcggag gtgttgatgg 240
agctatacat caagctgctg gaccagagct agtgcaagca tgccgaaag ttccagaggt 300
caaaccagga gtccgttgtc ctactggaga agctaggatt actcctgctt ttgagcttcc 360
tgccctcctg gtgattcaca ctgttgccc tatatatgat ttggac 406

<210> 7478

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-C5

<400> 7478

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aggaggacct tcccctcgga catcgcgcag gtctgcttga acaccgtgag gatggtcagc 120
gtcatgtact cgtacaacaa ggagcagagg cttcccgctc tcgaggacta cgcgacgatg 180
atgttggtgg tttgatttga agcatgcatg catgcaatgc tctctccgat ccgcggatat 240
gaaagtaaag tccttgtcat gcagataatg atttgtttg agaccagagt agtctagagt 300
agagattagg ctctgtaaaa ttagatagct aggattagaa taactgggca aacgaatata 360
tggtatatgt ccatatgtaa agatgcaata tatagcaaca tatatggtac cgtcgttaaa 420
a 421

<210> 7479

<211> 378

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-B1

<400> 7479

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tctttatctt ctggatgagg attatcactc aagctagcat gtatttcaaa cttaggaaaa 120
ttttacatca ttcaaaatgt aatccttcta attcactttt gtaaccactc cgatcatgta 180
caatgtaaac ttgttgtaaa ctgataaaat ttgtgaataa aaaaattccg ctgtaaatta 240
tggtgtgtgt tttgtgttta cttaatcctg cgatcttggc ggtaagtggg ttatccgggg 300
tccttgggac actcggacat atcctgttaa gttgtttggg gcacatgcat agccgtttga 360
ggtccttggg acaaagat 378

<210> 7480
<211> 389
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-014-Q1-E1-B10
<400> 7480

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gcatcatatg cccaaaatgg tcttggaac tatagtaatg aagcttttgg tctgccaac 120
agtccatata gatctcattc agctatactc gcagatgata ttgtttcacc ttcagctgga 180
cgtgaacata tatccctcga tgttcctaga ggaaggtata agacaactag tttgcctgtt 240
cctggctcttg gttcaagcag aggttctcag gtgttgggtg gcccatataa tggaaaccat 300
gatatgatct caaccaatac cctacaaaac atggctggaa ttcagacagg agcagcttgg 360
cttgaaactg atgctgcggc aaacacata 389

<210> 7481
<211> 385
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-014-Q1-E1-B11
<400> 7481

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ggcttactac caggaggtgg actactgctc ggaggaggtg aggtcgggtg ccccgcccg 120
cttcggccgc cacggaagcg gcgtccagca gcacgtcgtc aaggagaagt tcgaggaggt 180

cgacacggtc tcacgcgccg gcgccaacca ccaccaccac caccatggtc accacggcgg 240
ccacggcttc gtggtgcgcg agaccagggt cgaggaggac atcaacacct gcaccggcga 300
gttccacgag cgcagggaga gttcctcgc cagggctaac tgagccgccc ggcggccggc 360
atccacgccc gttcgtgcct gctg 385

<210> 7482
<211> 369
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-B3

<400> 7482

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atgtctttat attgctctca caccctccgt ttctcgctcc caccactgc cactgtactt 120
gtgttgtgtt gtgttgtgtg ctgcaagaag aataggagga ggaatagcat gtgctgaaaa 180
gcctgccagc gcgctttacg acaagcatat atgggggaga tcaccaagcc tttgccaagc 240
agaagcttcc gaagatggcc tacgactact acgcgtccgg cgcccacgat gagtggacgc 300
tgcaggagaa catggaggcc ttctccagga tcttgagcac ccgttgatga gataagattg 360
ccaagaaac 369

<210> 7483
<211> 269
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-B5

<400> 7483

cctgcacctc ttcattgacac tccacaaatg acgaaacttg cacctgaaca tatgggcaat 60
aaggtgaacc gaaaagcgat gccattatct aagcttgggg ataatgtga cgtaacattg 120
gacgtactct atctagcttc cgatccagga tcatatgtaa gtggggctat aattagtgtt 180
aacagtagtc tttggttgag tcgctcgctc catattcccc acgatgatct caaggcagtc 240
tttaaagttg tctctaaaat tgttaaggc 269

<210> 7484
 <211> 397
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-014-Q1-E1-B6

 <400> 7484

 aggccaaaac ccgcgcacac cggcgacggc aggagaacct cccgccggcc gccgccatgc 60
 cgccgcctct acaggcccac cgctactca tctcccaccg ccgcctaccc actccagctc 120
 gccgcgggtt caccgccgcc tcttcogtcc aatccgctcc cgccacaacc ttggccccgg 180
 gccccgccac atcctccatc ctctccatcc gcgagtcgct cctctcaggc gagaggaccg 240
 cggcggacat cacctccgag tacctctccc gcctccgccg taccgagccg accttgcgca 300
 gcttcatcca cgtcgaggac gccgccgccg agcgggaggc ggaggaaactc gaccggagga 360
 ttgcctccgg ggagaatgat gctgtgggtc cgctcgc 397

<210> 7485
 <211> 331
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-014-Q1-E1-B7

 <400> 7485

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 acaccgacct caacaaagga ggtaagtccg ttgatcaaaa agcataccgg tcaatgatag 120
 ggtcattact ttacttatgt gctagtatac cggatattat gcttagcgta tgcattgtgtg 180
 ctagatttca atccgatcct aaggagtgtc acttagtggc agtgaaacga atccttagat 240
 atttggttgc tacgccttgc ttcggactct ggtatccaaa ggggtctacc tttgacctga 300
 ttggatatcc agactccgat tatgctggat g 331

<210> 7486
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-014-Q1-E1-B8

 <400> 7486

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 cagcacaga accaccacca ccaaccatca gccgcaccac gcaccacagc caaagcgatg 120
 gcgtcgctca ccatgatggc gtccttcgcc gccgtggcgg tggccgcgcc ctgcgcgccg 180
 ggcaccttcg ccgtgggtctg gtccgccatg gtcgaccgct gccatgagcc cgccacgcta 240
 gcagcatgcc gaggccaggc ccgcgcgcca cggacgccgc gccgtcatgc tcgcggctgc 300
 tgccggcgcc gtggcagcca tcggcgccgc cggagccgcc atggcgggcc ccaataacgg 360
 gaccacctac gcgatcaaga ggtacgccgc catctgcgtt cacatgcccc ccgccaaggt 420
 c 421

<210> 7487
 <211> 383
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-014-Q1-E1-B9
 <400> 7487

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 tcctgcagta ctgctcatgg gaggtggaga gggcatgggt cctgtcaaaa agactgccag 120
 agccctagga gaatcattgt ttgacaaaga gcttgaaaa ccaattgggc agcttattgt 180
 catttggtgc cggaacaaaa cgctaagctc ctactgcag gcagttgaat ggaaaatacc 240
 agtaaaggtt aggggatttg aaacccaaat ggagaagtgg atgggagctt gtgattgcat 300
 tataacaaag gctggaccag gtaccattgc tgaagccttg ataaggggtc ttcctataat 360
 ccttaatgac ttcatacctg gac 383

<210> 7488
 <211> 68
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-014-Q1-E1-C1
 <400> 7488

gcatctctgc ctgccatct gcaaccgccc aacaccgctc ggccgcgcca tgacgcagcg 60
 ccgcaaca 68

<210> 7489
 <211> 372
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-014-Q1-E1-C10

 <400> 7489

aggacgcgtg ggctacgctc taatctgtgg caactgccat atgcataacg gtcttgcgag 60
 gaaagaggac tttgccttcg tcacatacta ctgccctcac tgtaatgccc tcaatggatc 120
 ccggcaacat gatgaccatg aattgggtacc tgattctggc aaggagagtc ctgattctca 180
 atctggcgga atcattggcc aagctgggtgc aagccttgca acctcagggtg ctgcgagtcc 240
 tgttgcaagc agcctaccaa cccttgaaga actctctgca gaggaagatt ctggggagaa 300
 ggcgagcagt gaccaacctg ccaattgaac tcattcatttc ctgtatattg tgttccttgt 360
 ggagtaatgg tt 372

<210> 7490
 <211> 419
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-014-Q1-E1-C12

 <400> 7490

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 catccgtacc agtcagctcc ggatgcccac gtcgtgccgc agcgccgtta caccgtgagg 120
 tctcagtctc actcgccaaa taatgctggt tctcaagacc atgagactca caagcagtac 180
 acgctggagt cctcgggcgc ttccggttgt tcaaggcatg gttctccctc cagccaaagc 240
 gtccatgccg ggagtggcag ccctgtgtct caccgacgaca gccactccgg ctccacgaac 300
 ggccatggat cacctgtgag cgcgtcgtgt gtcaccggcg aggaccctac tgatctcaag 360
 cagaaactga aggatcttga ggctgtaatg ctggggacgt ctgagactga ccccgagat 419

<210> 7491
 <211> 414
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-014-Q1-E1-A7

<400> 7491

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tgtcgggcgcc gtacgacgag gcccccgccc cgcgcccgcc cttegacttc gaggcgcggc 120
cggagagcgcc cgccgacgag gcgctcgccc gggcctccga ctccgagtcg gacgcgctgt 180
tcgactcgct cctcttcggc gaccagtctg ccttcttcga cgccggcgcg tacgagtcgc 240
tggaacagcct gttcagcgcc gacgcgctgc agagcaacgc cgccgcccgc gcggaaccagg 300
acatgccgct gtggagcttc gacgacggct gcctcgtcga ggacaacctc tcgttttaag 360
cctcggcgac tgttgttgtg tcntgagttt tgtaaattac gacctgtntt tttt 414

<210> 7492
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-H12

<400> 7492

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accacgactt ttcaggccac aagggaacca tcaaccagg agacgttcag tggctgacgg 180
cggggcgcgg cgctcgtgcac gcggagatgc ccgccgcgg ccaggagta cagaggggca 240
tcaacatctg gatcaacctc tctgccgcgg acaagatggg ggagccgacg taccacgacc 300
tgccgagcca cgacatcccc gccgcgcgg cggaacgcgc ttgcagcgtc tccgtcaagg 360
tcacgcgggg cgagtgcctc ggcaacgcgt ccccgctccg gccccgcacc ccgggct 417

<210> 7493
<211> 386
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-H2

<400> 7493

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gaaatgacaa ttatccactt tcaacagcag gtgcaaataa tttgtttttg ggtattgagc 120
aaggagctgg aagcagcaat ggccaggctg ctttttcgaa atttgactat gggagctcaa 180
tgtcattacc atctgggcag ggaatgtctg gtcttatcgt aaaaggggca aaatggcgcg 240
acgggggactg gttgtgcaac aactgcaaca accacaacta cgcattctcg gcgttttgca 300
acaggtgcaa aactcagaaa gaatctgcag ttcacctggt tgtgctatag cttgcttttg 360
ctggttcata ttgttggaact cctttg 386

<210> 7494
<211> 205
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-013-Q1-E1-H5
<400> 7494

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cggctgcctg gtgcagctat gaaaacgttt tgcaatagct ttttcggca gtcctcacat 120
catcacggtt gtgtttccgc ttccatatct gaatggaata catatacgta tgaaataaaa 180
ctgtgtaatg gctgttgctc ggatc 205

<210> 7495
<211> 389
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-013-Q1-E1-H6
<400> 7495

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gacacatttc ccatagagat tttgaaaaaa acaactgggt tcccgaccaa gaaatgggga 120
agcgatcaca ttgcccttgc ctgtgaattg gctttttacaa aatgacgcct tttatcaggc 180
ggagagagcg cctgcatagt tgctagtgc caaacacacc tcaagagaaa gaatactgtc 240
tacaggacga ttaactgaac caaacctcgc tcttttagag ctcgttaatt tatttcattt 300
ttttttcgac acaccttttt gaattgtgcg tgagtatgga gaaccggagt acatcacttg 360

ggccaattt tagagcattg ttcctgtt

389

<210> 7496

<211> 300

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-H7

<400> 7496

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catcatcata aatatata ctatactata ctactacgta cctaccgata tgcacccgag 120

caatgtgaat gcgtcgagta ctatatatct gttttctgca tctacatata tataccggat 180

caatcgccca atgtgaatgt aataagcaat atcattttct accacttttc attcctaacg 240

ctgagctttt tatgtactat atcttatatg atgaataata atatgaccgc cttgtgatct 300

<210> 7497

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-H8

<400> 7497

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gtcggcggtgc gtccttgccg aagatcagta tggcaactat gttacacagc atgttctaga 120

aagaggaaat gtcctatgaga ggagccaaat tattattaaa ttggctgggc aggttggttac 180

catgagccaa aataaatttg catcaaagt gatagagaag tgttttcaac atggtgatat 240

ggcggagcgg gatctcttga tcaggcagat tgtggagcag acagagggca atgacaattt 300

gctggcaatg atgaaggacc agtatgcgaa ttacgtggtc cagaagatac tcgaaacatg 360

caatgag 367

<210> 7498

<211> 286

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-014-Q1-E1-A1

<400> 7498

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cggcgccgag ccgtggctcg tgggtgctgta cgcgccttgg tgcccgttct gccaggccat 120
ggaggcctcc tacgtggagc tggccgagaa gctggcgggg tccggggtga aggtggccaa 180
gttccgcgcg gacggcgagc agaagccgtt cgcgcaggcc gagctgcaac tgcagagctt 240
tcccacgtg cgctgttcc cgggcccgcac cgccaggccc atcaag 286

<210> 7499

<211> 351

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-A10

<400> 7499

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gtggggcccta ttgctacgat gatttccggg atgactaacc tggataacga tgcagttaat 120
gcactatcaa ttctgcttac agctgtgctt accacttata tctgcattta catcatttag 180
ataactcgtt ggtaaatacc taatttgcac cctacttttc attgcgcact gtattgccac 240
cttaccctgc actgttcctg ccaatggcat atcctgctac ttctctgtgt agtggttagag 300
tttgtattag ggcatacaac tgcagattca tctccagcgt gcaacgaatg g 351

<210> 7500

<211> 398

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-A12

<400> 7500

accacgcgtc cgcacacacc attcctgggc ctgggcgaca aggccacaca cgatcgccgg 60
cagtttccga aacgagaaaa ggaagaaaca ggaggcgaga gatcgagatc gatgagcagc 120
ggtcagtcgt cgccatgcc acatggcggc gcccgccgg gagcgagccc ctccaagaag 180
ctgtggcgcg ggggtgcaagc cgtctacctc gtctctgtca agaagcacca gccgaagctc 240
gccgcgttcg gcgtccacat gcaccgcctc ctctccagca gcaagcgccg ccgcgcgcgc 300

cacctcgccg cgcgggggcg ggagcagaac ccggcgctga cgtacatgtc gtgcccgggtcc 360
atggacccccg ctgccgcggg ggggtgcaccg taaccgca 398

<210> 7501
<211> 421
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-014-Q1-E1-A2

<400> 7501

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tcctggggaa ccccttgcc gaaccgggcc caaaaaaacg ggcccacctt ggcccgggtcc 120
gggtccgggtt tgggcggcaa ggcaaaccct gtccaaaaa aggtggcgaa aacatcgacc 180
tcctctgacc ggcccctgtg gttccccggc gccgtggcgc ccgactacct ggacgggtcg 240
ctggtcggcg actacnggtt cgaccggttc ggtctcgga agcccggtga gtacctgcag 300
ttcgagttgg actcgctgga ccagaacctg gccagaatg aagccggcgg catcatcggc 360
acccggttcg agtcctccga agtcaagtcc accccgttgc agccctacag cgagggtgttc 420
g 421

<210> 7502
<211> 399
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-A4

<400> 7502

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agctggagga tggccgcacc ctagcagact acaacatcca aaaggagagc accctccacc 180
ttgtgctccg tctccgtggg ggtcagtaag tcatgggtcg tttaagctgc cgatgtgcct 240
gcgtcgtctg gtgccctctc catatggagg ttgtcgaagt atctgctgtt cgtgtcagtg 300
ttggtttaat aatggacogg ttgtgttgtg tgtgcgtact acccagaact atgacaaatc 360

atgaataagt ttgttgtttg aaattaaagc ctgtgctca 399

<210> 7503
<211> 399
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-A6

<400> 7503

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gcgccgcaa cagggccagg acggccgccc tcgtcagggc gtccgcccag gcgcaggcgc 120
aggcgggccc ccgcgccgtg ctccgggctgg tggccactgg catcgtcggc ggcgccttgt 180
cccaggcggg gcacgccgag accgtcaaga ccatcaagat cggagccccg ccggcgccct 240
ccggtggact ccccgggact ctgaactctg accaggccag ggacttcgac ctccccttga 300
aggagcgggt ctacctgcag ccgctgccgc cggcggaggc agttgccacg gtgaagacgt 360
ctgcgcatga catcatcaac ctcaagccac tcatcgaca 399

<210> 7504
<211> 367
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-F4

<400> 7504

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gcaactgcgg atcaagctgc ggctgctggc caagctgcaa gtgcgggtaa tatatatgat 120
aatatataag tgcaccgtgc atgattaatt tctccagcct tcttcttgct tagttaattt 180
ccatttatatt attttttcca ttgcaaaaca aacaaacaaa cagacaagaa caaagttaat 240
ttggatcgag tagttcaatc catttgccgc ctgtcctttt cagcaagaag taccctgacc 300
tgaggagagc gagcaccgcc gcgcaggcca ccgtcgtcct cggcgtggcc ccggagaaga 360
aggcgcg 367

<210> 7505
<211> 371
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-F5

<400> 7505

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cgaagatggt ggcggtgttc agcgggcagg tggtaggagt gccggcggag ctggtggcgg 120

cgggcagccg gacgccgtcg cccaagacga aggcgtcgca gctggtgggg cgcttctctg 180

ccgcgtccga gccggccgtg tccgtgcagc tcggcgacca cggccacctc gctactccc 240

acaccaacca ggcgctcctc cgccccaggt cgttcgcggc caaggacgag gtgttctgcc 300

tgttcgaagg ggtgctggac aacctgggtc gtctgagcca gcagcacggg ctgtcaagca 360

agggcgccaa c 371

<210> 7506

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-F7

<400> 7506

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atttgacaat ttaggaacta aacgagacta aaataaaaag aataatattt agtccctcaa 120

aaccaaactg gccttaggag gtcctagggg tagtgcacag tcattagatt cagattgaga 180

gtagaatcat ataaagccag caaccacaa ccatgcttat tttattctac tatgttctgg 240

aggcaagggg atagaccacg cgcttgcaact ggttttattc catggggttg tttgtgtctg 300

gcctgtgagt gacctgagaa tgacagcatt tggttggttt gtttgtccta gattcaaata 360

agctggt 367

<210> 7507

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-F8

<400> 7507

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 ccgcaaccat tttcccacaa tgctcacaag ctctatagc ttcctttctt cccccaatacc 180
 tctcaccagc ggtgtcttca gtatgtgaaa acccaattct tcaaccctac aggatccaac 240
 aggcaatcgc agcaggcatc ttacctttat cacccttgtt cctccaacaa ccgtcagccc 300
 tattacagca gttacctttg gtgcatttgt tggcacaaaa catcaaggca caacaactac 360
 aacaacttgt gct 373

<210> 7508

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-G1

<400> 7508

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 aaaccccggt gtggacgatg gccggtgatg atggccatcg ctaagatcat cttatgtcaa 120
 gcactcaagc cacagattgt tttcttggag atccaccttt aaaggcccca ttatttaggt 180
 tgaatgtgga tgacagattt atgttggtga ctggatgaga tgctcctaggg tttcctcacg 240
 ttgtagaata caactctcac aagtataaga atctaggaac atattccttc gatgtaacat 300
 acctcttttg tttaatctgt tttgtaagag aaaccagaag aacaccttgt atttcgggtg 360
 atattttgaa acccacagcc aattgaatgc cgggtttttt aggc 404

<210> 7509

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-G11

<400> 7509

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 atcgcgccga acagaatgct ttgcaaggac gcgccggcgc cggccatctc tgcgtctcgc 180

aagcagaagg tccggccccg cggcgcgtcg gcggcggtcg gcagtggaga cctcaggctc 240
 tcggtgtcgg acatgccgat gctatcgtgc cactacatcc agaaggggct gttcttcccg 300
 ccgcctcctc acggcgtgct ggccggcctcg ctggtgtcgt cgctcgtggc ggcgctctcc 360
 cgcgcgctcg gcgtcttctc cgcgctcgcc ggccgcctcg tcacgtcca cga 413

<210> 7510

<211> 361

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-G4

<400> 7510

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 tcatggccaa aatttcccct gaactcggcc tcggtcttgt aatccctgga cccgtcgggtg 120
 tccacaagga catgcttctc ggggcctcaa aagcgctagc tgatcaggcc acacaggaca 180
 acttcaacaa gggctccatc ttcacaccct tcaccatcat cagaaagatc tctgcgcaca 240
 tcgctgcagc cgtggatgca aaagcctacg agctcggctc ggcgaccogt ctgcatctcc 300
 ccagcgacct ggtgaaatat gcatagaact gcatgtacac tcccgtctac cgcaactacc 360
 g 361

<210> 7511

<211> 353

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-G5

<400> 7511

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa taaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
 aaaaaaaaa attaaaaaca ataaaaataa ataattctatc aaaaaaatat tactaaaaaa 120
 aaaaaattta aaaaaataca aaaggggggc ccccccaatg gtttcatcct ttattttcttc 180
 tttcatggaa ttttaaactt tttttaattt ttcactatctt ttcattacag ggtctttttt 240
 ttttaaactt cttgcaggga aactttttga tttttctaac tttaatccct ttgaataaat 300
 tccctttttt cattggtgcc ttttttcaag acagaccacc agctttacct ttt 353

<210> 7512
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-G6

 <400> 7512

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 ctcccttcgcg ggctcccggc tcccggccgc cagcgggacc acaccggcgt ccctcgtgggt 120
 ggccaccggc ccgcgcggcg ccggcgccggg gcccatctgc gcgtccatgt ccatgtcctc 180
 ctccaacccg ccctacgacc tgacgtcctt ccggttcagc cccatcaagg agtccatcgt 240
 gtcccgcgag atgaccgcgtc gctacatgac ggacatgatc acctacgccg acaccgacgt 300
 cgtcatcgtg ggcgccggct ccgcgggggt gtcctgcgcg tacgagctct ccaaggaccc 360
 cgccgtgagc atcgccatcc gtggacagtc ggtgtcgccg ggcggcggcg cgtggctggg 420
 c 421

<210> 7513
 <211> 392
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-G7

 <400> 7513

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 tggacagcaa tgcttgtttg tattaactga cttcgataca cattgaatca ccttgagatg 120
 attataaatg aactgtagac aattctatta gctttctaaa aagtccagga ttacctgatt 180
 tggatttcca aaaaccaggt tatgaattaa tgaagttagt agtcgaattc taaccaaatc 240
 tggacagaaa ttgcgtttag tattggtttga catttctaaa tgcgaatct catggtgatg 300
 ataataccaa aatttttagag gactttataa gctttccaaa aagtcttagt ttactatttt 360
 tggatgaata ctgtgtaagt tatgaattaa ac 392

<210> 7514
 <211> 439
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-H10

<400> 7514

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accattctct ctatctcctt tctctctcta cacatactca gacgagcaga agcagctagg 120
gacaccatag gcaaactact tcagcaagaa attaaactat ctctacgca agatcagaag 180
aaactgtgta tggagcaaga agaggttggc ctgcacctgg gcctctccct cggctccggc 240
caccaccacc aggagctcaa gcccacaacat ccgtcgcac cgtgtgcggc gttgttgagg 300
ccttctctgt cgctcagcgg cccggcgacc aaggatgatg gcccgaccgc accggtgagg 360
aggttcgctg ccgtgaagag ggagctgcag acgatggagg ggaacgacga cgaggccacc 420
ggcagggtac ttgtctact 439

<210> 7515

<211> 375

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-F2

<400> 7515

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tcacgtcggg gtttactctc cccggccatc agtgtctcat tgggaacgcc gcggtgccgc 120
cgggtgaacgc cgctgggaat gatctcgccg tggcagacct tgtttggggc cggttgcgtg 180
cgtgatctag ggttgggtctg ctctatgagc tcccaaaata aagagtgaag atttaagata 240
aagtgggtgc tgaagaggag tctactccag tgcttgttca tcaagtggat ggagccatct 300
aactgatcat cgtgtagaa gtatctagaa cctcttctct gcaacaaagg agaagtttta 360
ttcctttatc ttttg 375

<210> 7516

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-D9

<400> 7516

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tatttcttgg aatgcctatt gttccagcag taactgagct tattgctgct caatttctat 120

ggctagacta tgacgaccgc acaaaacca tttatctgta tataaactcc actggaacta 180

tggacgaaaa taacgagctt gttgcatctg aaactgatgc ttatgcaatt gctgatttta 240

tcaatcgaag taaatccaag gtttacacaa tcaatcttag catggcatat ggtcaggctg 300

cgatgcttct ttcccttggg gtcaagggca aaagaggagt gctgccgaat tcaatcacta 360

aattgcacct gcctaagggt cacaaatctg gtggagctgc cattgatatg tggat 415

<210> 7517

<211> 72

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-E10

<400> 7517

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ccgggtatgc ta 72

<210> 7518

<211> 388

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-E11

<400> 7518

ggtccacgac gcgtccggaa tttatacaaa agaaaatact tatgaatggt gaatccgtca 60

aaggccttga tgggttcaac atcaaaaaaa attacctctg caaggtagca aactttgatt 120

tttaaagtat aaagctgaga ccgggtggtt gacttgcacg agaagggagt ctcggtgtag 180

tgtctccgtt tgagtogaat taaggacatg tcgatgtagg cttgatgatt gaggaccttt 240

taactggtca catgcctcat catggataag ctttgcctcg ggcagactaa taccagaaag 300

gccaacacac aatgggagtg gagagatggc gagagtagcg tgtaccctcc atggtaagaa 360

gctggacggt ggtgtatctg tgctctcg 388

<210> 7519
 <211> 428
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-E2

<400> 7519

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 gtacaaagtt ggaacaatga ttgagatccc cagggcagct ctggtggctg atgagatagc 120
 ggagcaggct gaattcttct ccttcggaac gaacgacctg acgcagatga cctttgggta 180
 cagcagggat gatgtgggaa agttcattcc cgtctatctt gctcagggca tcatccaaca 240
 tgaccccttc gaggtcctgg accagagggg agtgggcgag ctggtgaagt ttgctacaga 300
 gaggggccgc aaagctaggc ctaacttgaa agtgggcatt tgtggagAAC acggtggaga 360
 gccttcgtct gtggccttct tcgcgaatgc tgggctggat tacgtttcct gctccccctt 420
 cagggttc 428

<210> 7520
 <211> 432
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-E4

<400> 7520

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 ctggtatacc ctgattgtga gtgagtgatc aagctagctg agctccgata ctcgctagct 120
 agctaggata ccgccatacc acaagtcttc ttcacaagtt taggagtgaac agcaacatga 180
 gatctcgatg gcctctgcca ccgtgctcaa gtctccttc cttcccaaga agtccgaatg 240
 gggcgccacc aggcaggccg ccgcgcccag gccgccacc gtctccatgg tcgtccgcgc 300
 ctccgcctac gccgatgagc tcgtgaagac cgcgaaaacg atcgcgtcgc cggggcgggg 360
 catcctggcg atggacgagt cgaacgcgac gtgcgggaag cggctggcgt catcgggctg 420
 gagaacacgg ag 432

<210> 7521

<211> 375
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-E5

 <400> 7521

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 cttcaactcg gggcgcggtt ccgcgctcac ccgcgccggc accgtggaga tggaggccag 120
 catcatggac ggccgcggcc gccgctgcgg cgccgtgtcc ggcgtctcca ccgtcaagaa 180
 ccccggtgcc ctggcgcgcc gcgtcatgga caactcgccc cactcgtaac tcgccttcga 240
 cggcgccgag gagttcgccc gtgcgcaggg cctggagacc gtggacaaca gctacttcat 300
 cacggaggac aacgtcggca tgctcaagct cgccaaggag gccggcagca tcctgttcga 360
 ctaccgcatc ccgct 375

<210> 7522
 <211> 371
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-E6

 <400> 7522

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 cgattggctc tgcacgggtgc gcgtctacga agataggaag acgtatgggc tgctgatcgc 120
 tgctgccctc ctgcaaggcg cttcggtcgg atgcctcgtc aagctcgccg tggaatttga 180
 tccaagcatc ctggtgacgg cattcgtggc gactgccatc gcgttcgcgt gcttcaccgg 240
 cgcgccaat ttggccagcc gcagggatta cctctacctg ggtgggctgc tctcgtcggg 300
 gctctccatc ctgctctggc tgcagatagc cggtccatc ttgggccaact ccgcatccag 360
 cttcatgttc g 371

<210> 7523
 <211> 378
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-E7

<400> 7523

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caccagccat ggtgcacgtc aacttctacc gcaactatgg taagacgttc aagaaaccaa 120
ggcgtcctta tgagaaggag cgtcttgatg ctgaactgaa gctgggtcggg gagtatgggc 180
tgaggtgcaa gcgtgagctt tggaggggtcc agtatgcact gagcaggatc cgtaatgctg 240
caaggcactt gctcaccctt gacgagaaga acccccgctg tatctttgag ggtgaggcgc 300
ttcttcgccg catgaaccgc tatgggctgc ttgctgaggg tcagaacaag cttgattatg 360
ttcttgccct caccgctg 378

<210> 7524

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-E8

<400> 7524

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aggccaactg catgcgcgcc caagccaaga cgagaactgc acaaggaaac cctccaccac 180
catcaacaca gctagcgaac tgagctgcag agggggccata aaatgtaatg taaccaacct 240
ctttcagagc ttctgctgac gtgtccagtt actatataca tacatacata cgttaacggg 300
gtactgtgtg tcttgttgta aatgtccccc ctgcgaggtg ttgccgattt tgtaagctac 360
gtacgtaact actacgctcg gcatcagctc gtgcatgtca ccttgtgcaa gtgcaacaca 420

<210> 7525

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-F1

<400> 7525

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ggcggaacgc ggaccctgcg ctgaagaacc ggacggggca ggtggaggtg ccctatacgc 120

tgctcaagcc gacggcacag cccggactgg tgctccgtgg catacccaac agcatcacgg 180
 tttgagcagc agagcgccgt cggcagctgt cagctgtgta cagtacagaa taataagggtg 240
 gtcgtgtttg gcgctatctc caccacataa acgtgaaaat gttttttttt gaattatatg 300
 gacatgcagg gccgcagccc gtaagcctgg cccagtttc ggttttctgt tttttttttt 360
 tttgcctcga tctggtg 377

<210> 7526
 <211> 373
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-013-Q1-E1-F11
 <400> 7526

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 caacacccca aacttgggtt caacttacgg aatccgcacc atcccaacct tgctcatctt 120
 caaggccggc aaaaagaagg aaaccttcat cggcgccttc ccaaattcaa ggctcacaac 180
 cctcatcaac aattacatcg gtagttcatg accatgccat gccatgccat gcatacatgc 240
 atcgacgact aaccacatat gtgtatctct agtacccttt gcatacggga tatgatcaat 300
 tcaagcagcc agccgtctgc tactgctgtg ttatatatac catacctcca tgtcgaatcc 360
 agagtacatt aat 373

<210> 7527
 <211> 169
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-013-Q1-E1-F12
 <400> 7527

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 gagaccagga aattagttaa gctcgcacgc aagccatcgg aaaaggcaag atgcggagcc 120
 catggggtgg aggcggcctg gagcacttgg atctgattcc cggcatccc 169

<210> 7528
 <211> 419
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-D7

<400> 7528

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ggaggtgccg gcggagctgg tggcggcggg cagccggacg ccgtcgccca agacgaaggc 180

gtcgcagctg gtggggcgct tcctggccgc gtccgagccg gccgtgtccg tgcagctcgg 240

cgaccacggc cacctcgctt actccacac caaccaggcg ctctccgcc ccaggtcggt 300

cgcgccaag gacgaggtgt tctgcctgtt cgaaggggtg ctggacaacc tgggtcgtct 360

gagccagcag cacgggtgtt caagcaaggg cgccaacgag gtgctcctcg tcctcaggt 419

<210> 7529

<211> 365

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-013-Q1-E1-C3

<400> 7529

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ggtccaaccc accgtcttca caaactgcac cgacgacatg aaaattgtgc gcgaagagat 180

cttcggcccc gtcattgtta tactcacgta taagactgtt gaggaagtcg tcgagcgtgc 240

aaacgccacc gacgtgggtc tcgcggcagg tgtcttcacc aaggatctta atctcgcgca 300

taaagtcatt gctcagcttg aagctggcat cacctgngtt aacacgtggg gtgagagtcc 360

ggctg 365

<210> 7530

<211> 267

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-C5

<400> 7530

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gctgcatatc atgattggag caagatcatc aacgtgccat cggaagatcc tgtcaacgca 120
atgcttgttt aatttcaaga tcgataggat cactaggtat ctacctagat aaacgagatt 180
gaacaaatat catccttgag cccggattta catcatacaa catcatatca gtgctgtgta 240
ctcgatccac aattaatgtc gctacat 267

<210> 7531
<211> 122
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-C6

<400> 7531

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agggttaaaaa agggatgatc atcgttgcat cggaaaggtc gtttcaacgg tatgctgggt 120
tg 122

<210> 7532
<211> 378
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-C7

<400> 7532

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tgtgtatctc atgatggaag atttattatg gagacaccat ataaggtagc aaaggctccc 120
gatggcaatg gcggagtata tgctgctcta aaatctaaaa ggttgctcga tgatatggct 180
gcaaaagggtg ttaagtatgt agattgctat ggagttgata atgtattggt ccgtgttgca 240
gatccaacat tcctaggata cttcattgac agaggtgtat ctgctgctgc taaggttgtc 300
aggaaggcat atccacaaga gaaagttgga gtatttggtc agcgtggaaa ggggtggacc 360
ctctctgtag ttgaatac 378

<210> 7533
<211> 387

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-C8

 <400> 7533

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 attggccacg ttgactctgg caagtcgacc accacaggac acctgatcta caagcttgga 120
 ggcattgaca agcgtgtgat cgagagggtt gagaaggagg ctgctgaaat gaacaagcgg 180
 tccttcaagt acgcatgggt gctcgacaag ctcaaggctg agcgtgagag aggtatcacc 240
 attgatatcg ctctgtggaa gtttgagacc accaagtact actgcacggg cattgatgcc 300
 cctggacacc gtgacttcat caagaacatg atcactggta cctcccaggc tgactgtgct 360
 gtccttatca ttgactccac cactgggt 387

<210> 7534
 <211> 373
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-C9

 <400> 7534

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 tggctccgtg gttgacagtg gcctgcgcgt cgtgaggtat atgagcgata agtcgatggg 120
 tategccacg atctgcatta cgttgtgctt gcatgtgttg aatgggacta ggctcttggt 180
 aacagcttga gagtgtactt gtttggtttt cctatttttt gcacattgtt tgtgtaaaac 240
 tgtaggactc atactgaaac tgtaaatacca aaaggaatgg aaatcataga cataagatca 300
 attgtgctgt acaattctgt tttatgcta tatacttgag gtctgaacga ctttagtgag 360
 agagttgttg atc 373

<210> 7535
 <211> 243
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-D11

 <400> 7535

gacgcgtccg cactccagcg cctctaccct cctcgctgcc tcaactccctc tgaaggtccc 60
 agatccttcc ggttacacaa acccgccggc accaatggct tctggtcagc tcgcttgcaac 120
 ctacgccgcc ctcatcctca gcgactacgg catcgccatc accgccgaga cgatcgccac 180
 catcgtgaat ggggctaata tcaaggtcga gtctactgg cggcgctct tcgctaagct 240
 cct 243

<210> 7536
 <211> 411
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-D12

<400> 7536

acctgcagca ctctgttaaa tttcttttga gcatgggtgt ctttgaagca tgacaatggc 60
 tgctcttagg tttgggattg ccaccatctt ctgggacaaa gagggagtgg aggatgattg 120
 atctgtcggc agtctgatgg ggatgaatta tacgaggtct tcaacgctga cacaagggt 180
 taatgaaaca aactcgaatc cagtgattat aggcgctccg cacggaccat atgattcatc 240
 tctcgttgga catgtagcta caagaatggg gtcagtgggc ggttgctgcc gcaactaaaa 300
 gtccattcag tgtggatgtc agttgggcta cgctatctaa gaataaaaag tttgaggaac 360
 aacgagcatg ttgccaagta gtttcttaag tataagttac tgcgtctagt t 411

<210> 7537
 <211> 378
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-D3

<400> 7537

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 aggtccacgt taggactcgg agagtgcgat tgcttgatt agagggggca ggcaaacat 120
 ccttgcttaa agcaatgtta ggacaagtta aagaaagaaa tagcactgtt cttgaatgca 180
 tacatgtcga tttgcatggc aagggaatat caaatggatt gtgctacata gattcgacaa 240
 cggtaaactt gcaggagcta cctttggagg ttgggcggtt caaagaagaa ctgttgtag 300

gactccatga tatcagcagg aagactgacc ttgttattgc ggtgcataac ctagcacacc 360
gaattccaca gtatcaac 378

<210> 7538
<211> 408
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-D4

<400> 7538

cggccaaggc gtcggccac gcgtccgcc acgcgtccga tccttacaga gagacacacc 60
cagcgcgcga gatattaca tcgatcatca tcaccagcga gcgagccggc cgagcagcac 120
cgatggcggc gtacatgccc gtgacgcacc gcgacgagga aggcaagaag gtgacggaga 180
agatgccggc cccggagacg cggcgcccg acacggccaa gcacttcgag cgcaagctgg 240
aggagcaggg cctccaccgc ttcgagcggc acccgcgaa cgcgccccgg ggcgtgggca 300
tcggcgcccc gccgccaag tccggcgcg gcggcaagta cacctgggag ggccccggca 360
gcgtcgtcga gggacagctc aaccgcgcc gcccgccatc gaccccaa 408

<210> 7539
<211> 372
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-D5

<400> 7539

cggacgcgtg ggggaagaac ttttcaagaa gcggacaaag acgaacaaac agttactacc 60
atcaatcgat cacaatcaca tgatggaagt aaaccctcaa acaaagatgg caacagggct 120
gatgaaagat ctggaaatta caattcagaa gataggaatg gtccaggtgg aagctccagg 180
aacaatccca ttcaggttga tgtaaattta acgaaaccag taaatgtaga tggcaacact 240
ggtggtgata atgcagaggc tggcatgtct agaactgggtg aaggaaggca ccttccaagc 300
aatgaatctg tgtccaccaa tggtaaagat ttaggtgtgg gttctgcaga caatgggcaa 360
cctcaacgaa tc 372

<210> 7540
 <211> 382
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-D6

 <400> 7540

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 gaccagacga caaacgtcga gaggggccga tcgtgatcga gcagcgatgt cgacgtcgcg 120
 gaggcggaca ctgctcaagg tcatcgtcct tggcgacagc ggggtcggga agacgtcgcct 180
 gatgaaccaa tatgtccaca aaaagttcag tcagcagtag aaagctacaa tcggtgcaga 240
 tttcgtcaca aaggagggtc tgatcgaaga caggctagtc acgttgacaga tatgggacac 300
 cgcggggcag gagagattcc agagtcttgg ggttgcatte tacagagggg ccgattgctg 360
 tgtgctcgtc tatgatgtta ac 382

<210> 7541
 <211> 420
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-C11

 <400> 7541

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 gggcccccaa taaggatata aaaaaaccta taaaggctgc ttccaagggt caactcaagg 120
 gtataatggg ttatgtggag gaggatctgg tttctaccga cttccttggg gacagcagg 180
 cgagcatctt cgacgccaaag gccgggatcg ctctgaacga ccacttcgtc aagcttgtct 240
 cgtggtacga caacgagtgg ggctacagca accgcgtcgt cgacctgac cgccacatgt 300
 tcaagaccca gtacagggtt ttccccctgc ttctcatgga tggttgctgc ttgtgtatgc 360
 cgacaataaa tgtggatgtc gccaggttca tgctgagtct ggacatgttt tgcacttttg 420

<210> 7542
 <211> 363
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-G8

<400> 7542

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cgatccatta ctcgctatgg acgcggcggg cggcgaccag ctaagcctgg ccgcggtgcg 120
cgacgcgctg gtgcggctgg aggactccgt ggtgttcgcg ctcatcgagc gcgcccggca 180
tccgcggaac gcgccagcct acgcgcccgc cgccaccgct ggagaacatt cgctcgtgga 240
gtttctcgtc cgggaagcag aggcctcaa cgcaaaggct ggacattatc aaaagccaga 300
agatgttcca ttcttccctc aagatctacc ctacactctc tttcctacaa agccttcccc 360
aaa 363

<210> 7543

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-C5

<400> 7543

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atctcaaccc catggccaag atcaagatcg ggatcaatgg gttcggcagg atcggaaggc 120
tggtggccag ggtggccctg cagagtgcgc atgtcgagct cgtcgccgtg aacgaccctc 180
tcatcagcac cgactacatg acctacatgt tcaagtaga cactgtgcac ggacagtgga 240
agcaccatga agtcaagggtg aaggactcca aaacccttct ctttggtgag aaggaggttg 300
ctgtgtttgg ctgcaggaac cctgaggaga tcccggtggg ttcggttggt gctgaatatg 360
ttgttgagtc aactggtggt ttactgacc aggagaaggc tgca 404

<210> 7544

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-E9

<400> 7544

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cgaattcctt cctatcgaat tctatagta aaattcctat aggatagaac gtacacaggg 120

tgtacacatt atatatgaat gaaacatatt cattaactta agcatactcc tttttttatt 180
 taatgagttg atattaatta aatatctttt ttttttagat ttttgcaaag gtttcattta 240
 cgcctaatacc atatcgagta gacctgtcg ttgtgagaat tcttaattca tgagttgtag 300
 ggagggactt atgtcaccac aaacagaaac taaagcaagt gttggattta aagctgggtg 360
 taaggattat aaattgactt actaaacccc g 391

<210> 7545

<211> 335

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-C11

<400> 7545

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 cctgacgcag atgacctttg ggtacagcag ggatgatgtg ggaaagtcca ttcccgctca 120
 tcttgctcag ggcacccctc aacatgaccc ctctcgaggtc ctggaccaga ggggagtggtg 180
 cgagctggtg aagtttgcta cagagagggg ccgcaaagct aggcctaact tgaagtggtg 240
 catttggtga gaacacggtg gagagccttc gtctgtggcc ttcttcgcga aggctgggct 300
 ggattacggt tcttgctccc ctttcaagggt tccga 335

<210> 7546

<211> 345

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-F6

<400> 7546

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 gggctggatt acgtttcttg ctcccccttc aggggtccga ttgctaggct agctgcagct 120
 caggtgcttg tctgaggctg cctcctcatt ggcaaccgga ttgcctgctg ctggtggatg 180
 tggatgatcaa cagtattatt acagagccat gctatgtgaa cattactagt agcagtgtc 240
 ataaaagcta caatcccatg tccttttttt cccagtcac gtaaaacttc caaactgtc 300
 catggttcaa aactctgttc ttcaatacat catcaattat cgatt 345

<210> 7547
 <211> 312
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-015-Q1-E1-G8

 <400> 7547

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 caatgattga gatccccagg gcagctctgg tggctgatga gatagcggag caggctgaat 120
 tcttctcctt cggaacgaac gacctgacgc agatgacctt tgggtacagc agggatgatg 180
 tgggaaagtt cattcccgctc tatcttgctc agggcattct ccaacatgac cccttcgagg 240
 tcttggacca gaggggagtg ggcgagctgg tgaagcttgc tacagagagg ggccgcaaag 300
 ctaggcctaa ct 312

<210> 7548
 <211> 427
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-009-Q1-E1-G9

 <400> 7548

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 caagtgttcc cagagataat ggttcctctt gttggaacac cacaggaact ggggcatcaa 120
 gtgactctta tccgccaagt tgctgagaaa gtgttcgcca atgtgggcaa gactatcggg 180
 tacaaaagttg gaacaatgat tgagatcccc agggcagctc tgggtggctga tgagatagcg 240
 gagcaggctg aattcttctc cttcggaaag aacgacctga cgcagatgac ctttgggtac 300
 agcagggatg atgtgggaaa gttcattcnc gtctatcttg ctcagggcat tctccaacat 360
 gacccttcg aggtcctgga ccagagggga gtgggcgagc tgggtgaagct tgctacagag 420
 aagggcc 427

<210> 7549
 <211> 394
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-G4

<400> 7549

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tgctacagag aggggcccga aagctaggcc taacttgaag gtgggcattt gtggagaaca 120

cggtggagag ccttcgtctg tggccttctt cgcaaggct gggctggatt acgtttcttg 180

ctcccccttc agggttccga ttgctaggct agctgcagct cagggtgcttg tctgaggctg 240

cctcctcggt ggcaaccgga ttgctgctg ctgggtgatg tggatgatcaa cagtattatt 300

acagagccat gctatgtgaa cattactagt agcagtgcc ataaaagcta caatcccatc 360

tccctttttt ttcagtcag taaaacttcc aaac 394

<210> 7550

<211> 423

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-006-Q1-E1-G6

<400> 7550

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ccaaccagga ggatgccctc gcgcgaattg aaaagctttc agaagtaaac ccgatgcttg 120

gcttccgtgg gtgcaggctt ggtatatcgt accctgaatt gacagagatg caagcccggg 180

ccatttttga agctgctata gcaatgacca accagggtgt tcaagtgttc ccagagataa 240

tggttcctct tgttgaaca ccacaggaac tggggcatca agtgactctt atccgccaag 300

ttgctgagaa agtgttcgcc aatgtgggca agactatcgg gtacaaagtt ggaacaatga 360

ttgagatcnc caaggcagct ctgggtggctg atgagatagc ggagcaggct gaattcttct 420

cct 423

<210> 7551

<211> 342

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-H7

<400> 7551

aagaattaca ctcaaggga aggtgacaat tatcgccaag cctggagtga agttggagat 60

tccagatgga gacgtacttg agaacaagga tgtcaatggc cctgaggatc ttttaagcaat 120

gtttgtcatc accagttttt cccaaggaca tgtcacagga actgccaagc ctagtcactc 180

ctactgagct ctatatTTTg taattttcat gtgcattccg attccgctgt gagggtcattg 240

ttaacccgc tagaaaataa ttgtaatctt ctttgctgcg tctgtacttc tgTTTTTggt 300

cgccaggacg tatatTTTta ctgaaatgat actccgaaga gc 342

<210> 7552

<211> 364

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-028-Q1-E1-E5

<400> 7552

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cttcggctac cgcttacgcg ctgatgcaaa ccggtgacaa gaagtgcctc gaatacatcg 180

acaggattgt caaaaaattc aacgnggag tcccaaatgt ntatccggtc gatcttttcg 240

agcacatctg ggttgtggat cggttggagc gactcgggat ctcccgtac ttccaacgag 300

agattgagca gtgcatggac tatgtgaaca ggcactggac tgaagatggg atttgctggg 360

ctag 364

<210> 7553

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-C1

<400> 7553

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tacctgtccg agaagatcgg gtactggagg tacatcacca tcttcaggca cctcaaggcg 120

aaccoggagt accaggtgta ccccatcttc aagtatttcg agaactggtg ccaggacgag 180
 aacaggcacg gcgacttctt ctctgccctg ctcaaggctc agccgcagtt cctcaatgac 240
 tggaaggcca agctctggtc acggttcttc tgcctctcgg tgtatgtgac catgtacctg 300
 aatgactgcc aacgcactgc attctatgag ggaattggtc tggacaccaa agaattcgac 360
 atgcatgtga tcattgagac caacgcacaa cggcg 395

<210> 7554
 <211> 439
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-019-Q1-E1-G7

<400> 7554

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 tatgattgga ggccttgacc agcaaattaa agagatcaaa gaggtcattg agcttccaat 180
 caaacatccg gaactgtttg agagccttgg aattgcacaa ccaaagggtg tccttcttta 240
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 caccttcatc aggggtgtctg gttctgagtt ggttcagaag tatattggtg agggctcccg 360
 gatggttagg gaactctttg ttatggccan ggaacatgca ccatccatta tatttatgga 420
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<210> 7555
 <211> 410
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-032-Q1-E1-A3

<400> 7555

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 aattgcaagg ggtgcttcac cataaccacg tgttttcagc ccccccaaa cggttggtgt 120
 gtgccctggc tgcaaaaactg tcctctgcc aaccacagga ggaaaggcaa ggctcactga 180

gggctgctct ttccgcanga agggagacta naggcgatgt ggtcttcaag ttttgctcta 240
 tgccagatac tagcgatcatg aactgccttt agctaagatt ttccataagt tgttctcgag 300
 cagctatgtg ttgcatgttg gctacttcca aacttatatc tggtttggtt tggattgtga 360
 tgaactaatg gctctttgaa tttatattat gatgttgacg ataattggtg 410

<210> 7556
 <211> 353
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-022-Q1-E1-G3
 <400> 7556

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 agcgtggggcg catgtctccc catgaagagc gactcatcct agagctgcac gctcgggtggg 120
 gaaacaggtg gtccaggata gcacgccgct tgccagggcg cactgacaat gagatcaaga 180
 actactggag gacacacatg agaaagaagg cacaggagag gaagaggaac atgtctccat 240
 cgtcgtcctc gtcttcgctg acttaccagt caggctaccc agatactcca tcaaccattg 300
 gagttgaggg acaggagctt catggtggca gtggctgcat cacaagcatc ctg 353

<210> 7557
 <211> 331
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-B1
 <400> 7557

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 atttccacga acacaaggca caccgacgca aatcgaccaa ctacacccga agtttccaac 180
 taacagcata gaggaattga tcaacagaac agcgacgccc cttttagaga tggaaagggg 240
 gttagggttt taaacgttcc tggtcgccgc cctggccacc gggggctcac ttggccagca 300
 tctgcgcggt agccgcctcc tgctgctgct g 331

<210> 7558

<211> 332
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-B11

 <400> 7558

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 cttcactagc aaaatgtatg caagatgaaa ccgttctcaa gaattttcaa gacgaagggtg 120
 aatacatcat acacaagaga ggggtgaagt ttcagttata caagacttct tcatctagtt 180
 tctttaagta caacagatca cttccattcc ttctctctac accaaaagcc atgtttccca 240
 cgtacgacga ctgcccaact cgccagcagc gatgtgcaag cacagggtgca gcagctacta 300
 atagccgatg tccttgtcgt cgaacacgaa gt 332

<210> 7559
 <211> 407
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-B7

 <400> 7559

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 tgtgctggat gaccaagagc tacgttacat ggcacttgaa tttgttaagc agctgggaga 120
 ggttttgcat tcagtcaatt ccaaaatcaa gtagccacca tttggaatta atttatgtta 180
 ttccagctcc aagaatgcaa aagctcaata ataaggactt tggacccaaa gatctcatgc 240
 atctggctga cactgtagat gggttttctc ttatgacata cgacttctca ggacctcaga 300
 atcctgggtcc cagtgcacct ctgaagtgga tacatcattc tttagcagca cttccttcag 360
 caaaagggtc ctctcatagc aattcacatt cacggatgat attcctt 407

<210> 7560
 <211> 267
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-001-Q1-E1-C10

 <400> 7560

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 ccttggagga aatgatcgag tatagcaatg atgtcctcgg tgcaaatgat aaacttggtg 180
 gtaatgtaag gatgaatata taaggataat gtgatgtaac ttatagacaa taacataaat 240
 aaaaagaata tcctatgttg tttaaaa 267

<210> 7561
 <211> 356
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-D1
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 tcggcagggg gtggcatacc atggagagct cgtcgccgctc agtgccgttc ccgctgctgc 120
 aggcgcgggt cgagagcacc tacgcgcct gcaccatccc ctaccgtttc ccctcogaca 180
 acccgcgcaa ggccaccct gtgcagatcc aatggattga cctctttctc aactctgtcc 240
 cgtccttcaa acagcgggcg gagaacgacc ccaccgtacc cgatgcgccc gcgaaagcgg 300
 agaagtctgc gcagaggtac acgtcaatgc ttgaagagtt gaagaagaat ccggag 356

<210> 7562
 <211> 231
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-D11
 <400> 7562

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 cgatgagctt aaggctggtg gtaacattgg tatcactatg tggatgtttc tgaggaactt 120
 ttagaacagc acggtctatg gtgcagttgt tgatgggtgt gtcattcagt acatgatcac 180
 tggatatgata catgctgact gtgatgtcga tagtactgtc tctatcattg g 231

<210> 7563
 <211> 442
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-001-Q1-E1-D3

<400> 7563

cggtctagta atccggctcg acncacgcgt cagcaatgat ccaaaaacgt atgtggaaga 60

agatgttttt gttacagatg aatctgggac taagaaaagg atacggctag aggacaatat 120

tgtgcggtgg agaaccatta ggaatgcaga tggcactaca tcttgtgaaa gcaatgcacg 180

ctttgtaaaa tggaggatg ggactatgca gcttctgatt ggcaatgagg ttcttgatat 240

atctgtacat gaggcgcac atgaccagtc ccatctgttt ttgaggcatg ggaagggaat 300

tctacaatca caaggaaggc ttttgcacaa aatgcgattt atgccatcct ccttgtcttc 360

aaagtcgcat cgcttattaa ctgctctggt tgattctcag aataagaaaa ctgttaagat 420

gcaaaaatgg tttgagacta ag 442

<210> 7564

<211> 278

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-D8

<400> 7564

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaag gaggaagctc 60

aaaaggataa aaaacttagg taccggttca tgcgacttca tacttctgta atagtgtgaa 120

caagcattca attcattgta cgggtggcttc acaagtttac ttcattggat aatctctttg 180

gtaagccatc ttaggcgcct tcacagagat ccccttttcg caagctgatg taataacttt 240

tatgttcgca ccattgggac ttcccaacat ttgcccaa 278

<210> 7565

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-E12

<400> 7565

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agcaagagct ctggatggtc attagcatgt cctctgttgc ggtcgtgaag ttcttctca 120
 tgctctactg ccgaacgttc aagaatgaga tcgtgagggc ctacgccag gaccatttct 180
 tcgacgtaat cacaaactct gtcggcctgg tctcggcgt gtcgctgtc cggtaaaaat 240
 ggtggatgga cctgttggc gccatactga tcgcttga cacgatcac acgtgggcgc 300
 gaacgggtgct ggagaacgta ggcacactga taggcaagtc ggcgccgca gactacctga 360
 cgaagctcac gtacttgatc tggaaccacc atgaggagat ccagcacatc gacacgggtgc 420
 gagcct 426

<210> 7566
 <211> 308
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-E9
 <400> 7566

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 atgaccatcg ggcgcagctc tagaggcttg cagggttct cgtgggtgcaa cataatcaga 180
 gtgcttgcca actatcttat aaattccatt cacaagacgt ctatggtcag gatagtcatt 240
 gtacaggcta tgccattgct tcaagtgcac ctctagcacg agatcctgct ttctaaatat 300
 ggcgaaat 308

<210> 7567
 <211> 404
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-F12
 <400> 7567

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 tcttcacgg tcgcgccgc tcgcgcagt gccagcagga ggtccttcac cgtgcgtgcc 180
 tctctccgca aggccactgc caccgccgc gtggacgttg ccgccagcgt cctgcgtgcc 240

ggcggcgccg ccatggccca tgaggtgctg ctgggcacag gcgacagcgg gctcgtcttc 300
 caggccagcc atttcacctg tcaacggcgg cgacactatc accttcagga acaacgccgg 360
 cttcccgcac aacgtcgtgt tcgacgaaga cgacgtgccg agcg 404

<210> 7568
 <211> 87
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-F6
 <400> 7568

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 aaaaaaaaaa gagaaaaaaaa cataaaa 87

<210> 7569
 <211> 312
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-F7
 <400> 7569

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 aggattatgc cctggtgtgg tgtatgagca ctggatgtaa cgaaagtacg aaccagagcc 180
 aggatagagg aatacagcgt ttgataagaa cactggtgtt aaaagtgtag atctctggtt 240
 tgggttgtgc tgataaattt ttgtaggcta tagccatcca atgaaaaatg ccatctgcgc 300
 tttcgtgcaa aa 312

<210> 7570
 <211> 207
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-F8
 <400> 7570

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aattgtcgtg tacgccagtc ttctcttgtc tggacacctc tgtacgctg gcacgctggc 120
 atacagctgt ctgcacgctt tatggcctgg tgtgcagtag tgagcctgtg cttctaccac 180
 tactactatt gatctgcagg ttggcac 207

<210> 7571
 <211> 434
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-F9
 <400> 7571

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 cgtcgagcat gggcgaaaga tgtgcaggtg atgaatgaag gcccgggtca catcccaatg 180
 cataaaattc ctgaaaacat ggagaaacag ttggagtggg gtaatgaagc gcctttctat 240
 acattgggtc ctttgacaac tgatattgca cctggttatg atcacatcac ttcagccatt 300
 ggtgctgcc aacattggagc tcttggcact gcacttcttt gctatgtaac accaaaggag 360
 caccttgggt tgcccaatcg tgatgatgtc aagactgggt taatatccta caaaatttct 420
 gctcatgctg ctga 434

<210> 7572
 <211> 432
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-001-Q1-E1-G8
 <400> 7572

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 taacaaggaa gctagaagtg ttgaacatga cccaccaga gatcctgcag aggtccaaca 180
 taacaaggaa gctagaactg tcgaacagga cccaccagc aacacagaag tgtggaagcc 240
 tgacaataag gctacaacta cagagcacga gtccgtgagc gctttcatag cattgagatc 300
 taatggggat tctacagatg tggaggcggc accaggcgat accttgatga tgcagggaca 360

ggagtcggaa gccacaatgc aacaagcatc ccacgcctgt tgaccaggcc cagcctaact 420
atgaacctga aa 432

<210> 7573
<211> 380
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-H10

<400> 7573

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agggtgctccc atccgcgtga tgaaacaaa ccggccctgc cttatcctat gactatagtt 180
acatgaacat cataaattaa tgataatttt gaagaaattg gccgatgact ccgacactgt 240
actcatgaaa gattattgga tgggctgtgt ccaccgcctg tgttgggctg ggattgttgt 300
agacttgcat tgatcttgct cgataagctt gtacagttca gtacagacac acattgaaac 360
catatagata caggataaat 380

<210> 7574
<211> 237
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-H11

<400> 7574

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aaaagaaaaa aaaaaagcaa catggcggca cacatcaaaa tgatacaagt cttaatatag 120
cggggcggcg gctctaaagg tctatggcta aggttcctt gctttgcatg attgactgct 180
tctacatagc tgcttaactt caattcacgg gccttttttt aaaaaagtcg tattgga 237

<210> 7575
<211> 289
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-H2

<400> 7575

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tcttagttac cgtgggtgaa gccagctaata taatgtttta gagaaataat tctctcttgg 120
agactactac tactgttcta cctcagcatc accggtgctg gtgcgtgtgt aacgtgggtca 180
ctgtgggtat catcactacc ctaccctaag ccctatcaga acataagcac cccttggaga 240
tttgtgccgt ctaaataaat atagttggtt cagcgtcgtg actggaaaa 289

<210> 7576

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-001-Q1-E1-H3

<400> 7576

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tgaacccggc gtggcagcag cggacgctgc gggcgtactg cgcgcgaccgg ggcgtccacg 180
tcgccgccta ctgccgctg ggagggcaga actgggacgg gcggggcaac gccgtgctcg 240
actcggaggt gctcgcggag atagccaggg cgagggggaa gaccgtggca caggtggcgc 300
tgcgatggat acatgagcag ggagtgcgt gcacgtcaa gagctacaac aaggagaggc 360
tgaagcagaa cctcgagata ttcgactggg agctgaccga tgacgaccgg ct 412

<210> 7577

<211> 416

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-002-Q1-E1-A5

<400> 7577

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aaaaggaagc cgacgccacg cagccatcg ccgcctctat cctctcctcg tctctccct 120
ccccctctct ctccctgctc cacctccacc aaccaatata cacctccctc tctaaatacc 180

acttcgtccg agagcacaaa gcaggggtatc ttcttttcaa aagaaacttg gctgggtgtt 240
gacgcacgca gccggcggca acctgtgcgg ggagcgccaa gggctccagg aaagaatcgg 300
ccgcgggctc gcgatcggga aggggagcgg ggcgcatgcg cgagcactgg cacggcgacg 360
gcgacggcga cgacgagcat taagcccaac ccgggggttcg ggaaggcccc ngggca 416

<210> 7578

<211> 367

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-002-Q1-E1-B8

<400> 7578

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gaaagcgcaa gctgatgata cctgcgtcac tggcgtagcg gcctgaaccg gcaggctgct 120
tctcaggaga ctgcaacatc cccggaaact ccacacttct atatgacctt ttctcgtcg 180
ggatctacaa gtgagccctc gatgacaggg aatgttcaga acctaagagc agagacaagg 240
aggaattctt ggcggtgaaa gcacctgcag aggcagagcc acttgacaga gcttctgtac 300
tccagagagc tacctggatt gaataaaatg atgatata taaaccatcc ttgttacgta 360
atanaan 367

<210> 7579

<211> 357

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-D1

<400> 7579

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atgacatgct gcgcgccaca tttaaagaaa tagcttatca ggccacacag gacaatttcc 120
agaagggctc catcttccga cccttcacac atcatcataa agatctctgc gcacatcact 180
gcagccgtgg ttgcataatc ctacgagctc ggtctggcta cacgtctgac tcacaccatt 240
gacgtgatga tatatgcata gaactgcatg tacattcccc tctatcgcaa ctaccgttaa 300
tgctgcgggg atcaattttg cagtaataac atatctatca acgcagatgg tactctg 357

<210> 7580
 <211> 192
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-002-Q1-E1-D8

 <400> 7580

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 tacgtgctag ctagcatagg aaaaaacaac atgaaatcgt acaaccaacc aatccctcgc 120
 actgttttag ttgttagctg tacgcgaaac tgttcacca attgatcaaa tgaaaattat 180
 ttttccttaa aa 192

<210> 7581
 <211> 260
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-002-Q1-E1-G12

 <400> 7581

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 aatgctcctt cagtcctgct tctttaattc taattaaagt tcaattcagt ggccgtctgt 180
 ttgacaaggc ctttcctggc ataaccctg cttatcccaa tttagccgcc tcttcatac 240
 acttcgctt tcagcaactt 260

<210> 7582
 <211> 238
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-002-Q1-E1-G4

 <400> 7582

 agcccacgcg tccgaaaaaa aaaaaaaaga aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
 aaaaaagatc aaaaaggata acaaacttaa atagacataa agtaaatttg gagggcttat 120
 caactagtat cgcctctatg gagttgaccg aatgtcgctt tatcgtgggtg cagtctagaa 180

agcactcctc tgtgagctac cgtacgggtgc ctttaaggat gccactgttt ttgctaaa 238

<210> 7583

<211> 337

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-002-Q1-E1-H2

<400> 7583

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ccgcccgtcg tcggactcgg cctcgcgtcg cgagctccgc gtcagcaacc ccggcttctt 120

cctcccgtcg cgtaccgcgc cgggtctccga cgccgtctca taccgcggac acttgctcag 180

ggtcgctaaa tcgtggcccg ggtccggcga gcttgccggc atgaatgaag tctatgcgga 240

tgctgatgtg tgagtggacg ccgggaaagt gctggctgac gtgatcgagc tcactctggga 300

cttggcctca gggtcagtgc cgcttgagat cgtatct 337

<210> 7584

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-A11

<400> 7584

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tccgaaaaag ctgctccttc taaggagcca aaggcaaagg atgtcaagaa ggagggtcca 120

aaggaggccc ccaagccaaa ggtggttgag gcaccagcag aagaggaagc accaaagcca 180

aagccaaaga atcctcttga cttgctgcca ccaagcaaga tggtccttga tgactggaag 240

aggctatact caaacacaaa gactaacttc cgggaggttg ccatcaaagg tttctgggac 300

atgtacgacc cagagggcta ctctttgtgg ttctgtgact acaagtacaa tgatgagaac 360

accgtctcct ttgtgacct gaacaagggt ggtggattcc tgcaacggat ggacctgtgc 420

cgca 424

<210> 7585

<211> 340

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-A9

 <400> 7585

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 aggaggtgta cgggtggcg gggaccaacg gagtgaccac tctagtgaac cgaggggcaa 180
 tcggcaccac ctgggtcttc tcgtggcctg tcaccgacgg gcccgccggc gccgacgcga 240
 acgtcgtcgg ccatcttcag ggcaccggcg ttcaagtcgc cacttacccc gactacatgt 300
 ggcactactc ccttgggctg gtgttcggcc agggaaccag 340

<210> 7586
 <211> 305
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-B2

 <400> 7586

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 tgcgacttcc agggcccctg cgtcgccggt gggtagatcc acggcgggctt ccccttcggc 180
 cggttcagcc cggcggggta cccaagcacc gactatcact acgaaacgct ggatgctttc 240
 ctcttccact gcgcggaatc tacgtgaggt ccccgcgccc cccgttgagc ttcccaacgt 300
 gggcg 305

<210> 7587
 <211> 72
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-B9

 <400> 7587

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 aaaaaaata aa 72

<210> 7588
 <211> 73
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-D11

<400> 7588

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ccaaaattca att 73

<210> 7589
 <211> 460
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-D3

<400> 7589

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ccctgcttcg tgccgcgccc cgacgcccc gcgggcgccc cggaggacga cggctacgtg 180

ctgtgctacg tgcacgacga ggcccgcggc gcgtcggaaa tgctcgtcgt caacgccccg 240

gacatgagag cggaggccgc cgtcaagctg ccgggcgcgc tcccgtacgg gttgcacggc 300

acgttcatcg ccggcaagga gctgcagcgg caggcctagt gtggtgccgt tgccgtgtcg 360

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caacagacac tacaattacc aggttgata ttgacttggc 460

<210> 7590
 <211> 437
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-D5

<400> 7590

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ccatatggag agagctgcgt caagctgcgc tagcctccta gcacaaagga ggtgctactc 180
cgtggccgcg gtcgtggtga agggatgcgg gcggaaggcc gtggagaagg tggccaagcg 240
catcatgggc aaggaggtga acaccgcggc tgctccggg gagaagacgc cgtgggtgcc 300
ggacccggtc accggctact accgcccggc gggtagcgcc aaggaggtgg acgcccggga 360
gcttcgcgcc aggctgctca ccaagaggat cgccaactaa atcaatctag cagcagagca 420
gtgccgctga aaataat 437

<210> 7591
<211> 471
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-003-Q1-E1-D6
<400> 7591

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ccacaagagc aatgcatact tcaagcggtt ccaggtgaag ttcaagagaa ggcgcgctgg 180
caagacagac tacagggcca ggataaggct gattaaccaa gacaaaaaca agtacaatac 240
acccaaatac agatttggtg tgcgatttac caacaaggac atcacagcac aaatcatatc 300
tgctagtata gcaggtgata tggttcttgc ttctgcttac tcgcatgagt tgccacgata 360
tggtctcgaa gttggtctga ccaactatgc agctgcctac tgcaactgggc ttccgtttgg 420
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<210> 7592
<211> 406
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-003-Q1-E1-D7
<400> 7592

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cgctgggaag gatcatgggg gatcggagca aggcggggga cccaccgttt tgtcgcccgg 180

atcgacgagg accgagaaga ctggcagcgg ttgcggcgcg gccttgggat acggacgac 240
 tgcgatgtgt gcgagagcgc aacggcggtg ctcttcagtg cggccgacga ggctgcgcct 300
 tgccggcctt gcgacgagaa ggtacacatg tccaacgtgc ttgctagtcc gcatgtgaga 360
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<210> 7593
 <211> 414
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-D9
 <400> 7593

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 acgacgatta caacgaaatt gacatggggg atgaggatga gccccagaa ccggagattg 180
 aggaaggagc tgaagaagag cctgagaaca acgaagatgc ccctgatgac gtcataagg 240
 gtgaggggtga agataaggaa caggaaaaga ccaagcgtga acgcaaaaaca acaaaatata 300
 tgacgaagta cgaacgtgcg cgcacccctg gtacacgagc cttgcagata agcatgaatg 360
 ctccagtcac ggttgagctt gaggggtgaaa ctgaccctct tgagattgca atga 414

<210> 7594
 <211> 455
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
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 <400> 7594

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 tgagatatct caacaagtgg attcgggaagt actggagctt ctcagaagcg cacacttgcc 300

cggaggctgt gggaaacctc agattggagc agtgtgacag cgtgccgtcg tttggagcag 360
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 ctctctctcc tcccctgccg ccgccaaggc caaggcgctc gcgtccgctg ccccgctcgtc 180
 tccatgcggc cacctccagt tcccgcggcg gcacggcggc ccgcgcgcgg tgcggctgctg 240
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 gtccaagaag caggaggagg ggctcgtcac caacaagtac aagcccaagg agccgtacgt 360
 cgggaggtgc ctgctcaaca ccaggatcac cggcgaccaa gccgcggggg agaacttgca 420
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<210> 7596
 <211> 407
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-003-Q1-E1-E7
 <400> 7596

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 gaatttgctt tgaaagagac atatgcattg ttatgcttcc ctgccgccat catgttctct 180
 gcgagccatg ctctaacaag tgtcagtcac gcccaatttg ccgattgacc gttgagggca 240
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407

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<211> 377

<212> DNA

<213> Zea mays

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tactgctcgg aggaggtgag gtcggtggcc ccggccggct tcggccgcca cggcggcggc 180

gtccagcagc acgtcgtcaa ggagaagttc gaggaggtcg acacggtctc acgcgccggc 240

gccaaaccacc accaccacca tggtcaccac ggcggccacg gcttcgtggg gcgcgagacc 300

agggtcgaag aggacatcaa cacctgcacc ggcgaggtcc acgagcgcag ggagagcttc 360

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<212> DNA

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<223> unsure at all n locations

<223> Clone ID: LIB189-003-Q1-E1-E9

<400> 7598

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agtttgtcat ggcgtctaag cgcatectca aggagctgaa ggacctgcag aaagaccccc 180

ccacatcatg cagtgcaggt cctgctggtg aggacatggt tcattggcaa gcaacaatta 240

tgggaccacc tgacagtenc tatgctggtg gtgttttctt agtgaacatt catttcccgc 300

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tcaacagcaa tggaaatata tgccttgaca ttctcaaag 399

<210> 7599

<211> 376

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-F10

 <400> 7599

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 cacggatgcg tcgagctcgg acctggacga ggtcagcagc tagcttagct agctagctag 180
 cagaaccgac cgtacgtgcc ggctggccac aacatgcagt caagaacgta cgtacgtata 240
 tgtataccgc caccagctcg tcgcgcgcgc agctgtgctg tgcattgccg acgtgtgcgg 300
 ccggcctcga cctcgatctc gaagagagga tgtgatcaag ctgagttacg gataaggggg 360
 aacaacccat ccacac 376

<210> 7600
 <211> 445
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-F3

 <400> 7600

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 tttgatataa taccaatata gagagaacat gccttaaatt ttatctgtgc agccatttgg 240
 tgaaataatt gtttcgactc tgcagtaccg catgaaacaa accgttgtaa gtttggaata 300
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<210> 7601
 <211> 410
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-F5

<400> 7601

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tcaccggcgg gaggaaggg caggcgggtg tggcgatggc gtccgctgac gcgcgcttgg 180

cggggatcgc ctctccatc cgcgtcatcc ccgacttccc caagccaggg atcatgttcc 240

aggacatcac gacgttgctg ctcgatcca aggcgttccg tgacaccatc gacctctttg 300

tcgagcggta caaggaccaa gggatcacg tggttgctgg tgttgaagct agagggttca 360

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<210> 7602

<211> 460

<212> DNA

<213> Zea mays

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<400> 7602

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gttttacttc catgaggaag tcaggagagc tgctgttgcg gccatgccgg aacttctacg 120

ctcagcaaaa ttggctgttg agaaagggca ggctcaagga cgtgatgagt cttatgtcaa 180

acagttgtct gactacataa ttgcagcact tgttgaagca ctgcacaagg agccagaaac 240

agaaatgtgc tcatccatgc tggattcttt aaacgagtgt atgcagcttt cgggtctttt 300

gcttgatgaa gcccaagtac gagctatcat agatgagatt aaaaacgtca ttatagccag 360

tgccacccgg aaaagagaac gctcggagag aacaaaagcc ggagaatttt gatcctgatg 420

aaggagagct actcaaagaa gagaatgaac aggaggagga 460

<210> 7603

<211> 398

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-F9

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gcagcctcgc tccaagccgc ggccaccctg atgcagccgg ccaagatcgg cggccggggcg 120
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 gacgccggcg ccgccaggat cacgtgctcc ctgcaggacg tcgccagcag gtgcgtcgac 240
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 gtgaaaggca cgggcacggc gaaccagtgc ccgaccat 398

<210> 7604

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-G1

<400> 7604

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<210> 7605

<211> 379

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-003-Q1-E1-G2

<400> 7605

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 gatgtcttac tcaaggggct caaggtaagc actatttatt ttataacctt gaatgacct 180
 ctttaaaaac cttcttgttt caatttgtct tcaagtgatc ttgctcgggt ttctgatagt 240

ttttttaciaa gtgaaaggta tggatctcgc tcaccttact cgagaagcac aaggtagcga 300
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<210> 7606
 <211> 414
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-G5

 <400> 7606

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 tcctttcgtt tcgaagcctc gcgagccccg acgatggcca ccgccgcggt gtcggtcgac 180
 gagaagctcg acaagcttcg cgccgaggtc gccaaagctcg accagatcag gcgagtgcc 240
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 ctgagtgtgt ttttccgcgc agcgagaacg agaagtccgg gttcatcagc ctctgttcac 360
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<210> 7607
 <211> 418
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-003-Q1-E1-G7

 <400> 7607

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 cacaaaacat tagggcacia caactacaac aacttgtgct aggaaacctt gctgcatact 180
 ctcagcaaca tcagtttctt ccattcaacc aactggctgc attgaactct gctgcttatt 240
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 tcaatcaact ggcagcattg aactctgctg cttatttaca acagcaacag ctaccaccat 360
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 <211> 453
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-003-Q1-E1-G9

<400> 7608

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 tcgttacgac cgtaagcagt ccggttacgg aggtcagacc aagcccgctt tccacaagag 240
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 cacagctcgc ccttaagcga tgcaagcact tcgagcttgg cggtgacaag aagaccaagg 360
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 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-A11

<400> 7609

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 tggtgttatg atggtggtat ttgagatggc tctaggttct agatccataa tataat 176

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 <211> 308
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-A12

 <400> 7610

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tgatcataca ttgatctatg atgctgcatg ttaatttgct taaaggaaga aaaaaaatag 180
atgatgaaga tgcattgactt tggcatagat gagaacaata atgtatgtta aggactaatt 240
atcttgatcc atcaaaaaaa aaaaaaaaac aaaagaaaaa aaaaacaaac aaaaaacaaa 300
aataaaaa 308

<210> 7611
<211> 472
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-004-Q1-E1-A2
<400> 7611

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atatgataac ccctggagtt gatgctcaag gccaacctat tgaccctgag aagatgcagg 180
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ggccgcccta taattgttga gtattctcct gtgaccgact tccgtgaagc aacctgtagg 420
cagtttgagg agaacagctg caaccgtggt ggctactgta atttcatgca tg 472

<210> 7612
<211> 451
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-004-Q1-E1-A4
<400> 7612

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actcaaaca atagtacttt gaatgaggag ttggaagtac atcagaaca gttgaacgat 180

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 gtatcttcta ctatacaaga gcacgaagaa ctgaagagca agtaccaaaa tacaatggaa 360
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<210> 7613

<211> 459

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-A9

<400> 7613

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 ctgcacggct tgatcacaaa cgaactgatg gagagcgggt tgttcggcgc cggacaaggg 420
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<210> 7614

<211> 436

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-B10

<400> 7614

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<210> 7615
 <211> 435
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-004-Q1-E1-B11
 <400> 7615

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<210> 7616
 <211> 295
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-004-Q1-E1-B12
 <400> 7616

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 tgcctatgtg tgagcatgct tgcttgtaac gagaccttga attgttcgga aatgagcatt 240
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<210> 7617
 <211> 465
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-B4

<400> 7617

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aggaggagtg gaacatcgag gaggtggact tcaacatctg gggcctctcc atggactgct 420
tcctgccgcc cagcgacctc agggatggca aggagagcca ggacg 465

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<210> 7618
 <211> 456
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-B8

<400> 7618

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atgacgcca aaagctgcac gctccatctc tccgatggca cgcagcagat ctgcagctag 300
ctctgaacca atgtgtgctg gattcgatct ggacattgac caacctgctg gttttcgcaa 360
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<211> 441
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-B9

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<210> 7620
 <211> 359
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-C1

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 ccgctgctca actgcgggcg cgcgccggct gcggcggcgt cggtcgagca cctcgcggtg 180
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<210> 7621
 <211> 57
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-C11

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<210> 7622

<211> 462

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-004-Q1-E1-C2

<400> 7622

ggccggtccg acattaccgg gtccaccac gcgtccgag gacgcgtggg cagcagctcc 60

gctcgtcgat cagctctcgg ctgaccactc atcgccagtg ggtgcctgcc gaccaggtct 120

cgccgccgcc accgccggg tagagagggg agggagaggg ggaaaaaact ggcccagatc 180

gagaggtaca gcacgaaaaa gagaggcaag agagataggg gaccggaggg cgccggggccg 240

gggcccaaga ccgagggggt cgtgcgcagg aagctgatga ggctcctgtc gctcgtcccc 300

ttcggctgcc gtgctggacc catcgacgac gcgccgccgc ncgtggacca cgccgccgcc 360

gcgaggaggc gccggaggag gagggccaac agggccgcc agctgctggg ggctgctgcg 420

ggtgcgccgc agcagtggcg cccctcgctc ggcgacatct gc 462

<210> 7623

<211> 458

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-004-Q1-E1-C5

<400> 7623

attcccggt ccaccacgc gtccgacgga gcagccgag tcccgcgat cccgccgccg 60

gtcgccctca tacttctctg tctctgcctt cgtttctctt tccaacaatc aagatgagcc 120

gtggcggtag cgccgggtggg ggtcaaagtt ctctgggtta cctctttgga agcggtgagc 180

ccccaaaacc agcagtggca ccagctgtaa gtgctccacc tgctgctgca ggtgctccac 240

ctgctgagaa accacctgct gcaaagcctg atggcaccag tcagattgct gctgggggtta 300

ccagccaaac caataactac cacagggccg acggtcagaa caccggaaac ttccttacgg 360

accgtccttc gaccaaagtc cacgctgctc ctgncggtgg ctcttccctg ggaatactgt 420
 ttggtggcaa ctgatgccgc tcaacaagct atcacccc 458

<210> 7624
 <211> 429
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-C6

<400> 7624

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 gatagtagcg gactacaagt actactccat cttcaggaag cactgcaggc catcctgtta 120
 tccagacgag cattacatac cgacttatct tcatctgttc catggggcac tcaacgccaa 180
 caggactatc acatgggttg attgggtcaag aggaggcccg caccagcaa gttatgggtgc 240
 cacagacatc acagaagact tcatccaggc catcaggaat aatgggtacgc agtgctttta 300
 caactcgaag cccacctctg tctgctacct cttcgcgagg aagtctgctc ctaatgcttt 360
 gccacggctg atgaacctca cctcgaccgt gctggacttc tgagccgatt ctcaccatgc 420
 gggcgggcg 429

<210> 7625
 <211> 396
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-C9

<400> 7625

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 ctggtcacc caaacaaaa cgaagctgcg ggctgcggc ggcagcaaca gagagcagag 120
 atgctgcaat tcccggcgt gatgcggcag tggccatcgc cgccgctgat cccggcgtcc 180
 acgctgctcc ccgtgccggc cacctcccag gatgacgagg tctcctcgc catggccgag 240
 tccgacctcg aggacaagtt gaatgagatc cggaagacca acagccacct gattatcatc 300
 gggaagccca caggcgacac caaggaggag tatgacgctg aggtggagga cgacgatgca 360
 gacaacgtcg aggagtctga tggcgatgac ttcgac 396

<210> 7626
 <211> 445
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-D10

<400> 7626

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 cggcgccgctc gccgcccgc tcgtgctcag gctcgccacc ggagggatgc atctgccgga 120
 gtacgcgctg gcggggggcg tgagcggatg gaacgcggcg gtgctggagg cggccatggc 180
 gttcgggctc atgtacgcct actttgcgac ggtgatggac aaagcgcgga gggtcgcgcg 240
 cggcgccgga gcgctggcg cgccgctcgc cgtggggctt ctggcggggg ccaacgtgct 300
 ggctgcggc gcgctggagg gcgccgtgat gaatccggcg cgcgcgttcg ggcccgccgt 360
 cgtgggctcc cgtcgctgga gacaccaatg ggtgtactgg gtggggccca tggtcggcgcg 420
 cggcctctcc ggcgtcctcc acgag 445

<210> 7627
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-D5

<400> 7627

cccacgcgtc cgaccaagca tgagcctacg cattgatcgc atacgtcatg ggatctgcac 60
 ataaaactat agttcccaga tcgtcaatat agcagggaaa gaacacttca tcttttaccg 120
 cggtaatttt gctgttatat gcataatcag tttccaagca gattaaagag aaaagattaa 180
 agtttcgtca gtttgccctta aggtggttca aatggtctgt gatacgaaac gtatgttgct 240
 atctcgtaag gcgcatgtgg gatagttaca ttgccgaatg ctactatcta cgagattttc 300
 tcgtgtaa atcagctagt tttttgctga catagtcaga cactctgcac aagctggatt 360
 ttcagagat ggtgatgtac ctgcagcatc tcggaattag gacattagca cagatgatc 420
 tagagatagt 430

<210> 7628

<211> 439
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-D6

 <400> 7628

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 tggcagagca attgcgcctg gttatggaac caactcttgc tagtaagctt caaggggatt 120
 atagaactgg aaagagaata aacatgaaga aggttattcc atatattgcg agtcatttcc 180
 gcagggacaa gatatggttg cgccgaacta agcctaataa acggaattac caagtgggta 240
 ttgctgttga tgactctaga agtatgtctg agggcaaagtg tggaaaattt gctatcgagg 300
 cattagttac tgtgtgccgt gctatgtcac agcttgaggt tggacaattt gcagttgcaa 360
 gttttgggaa gaaggggaac gttagtgtgc tacacgattt tgatcagatc tttaatagtg 420
 aagctggagt taatgtgat 439

<210> 7629
 <211> 443
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-D9

 <400> 7629

 gtaccggtct agaattcccg ggccgaccca cgcgtcaagg cgagcagcag tacttcaccg 60
 acaccaccac cctcttcata atcgagctca tctcatcgg ctggggccgag ggccgccgtt 120
 gggctgacat catcaagccc ggaagcgtca acaccgatcc catcttcccc agcaacaagc 180
 tcaccggcac cgacgtcggg taccctggtg gcctgtggtt tgaccgcgtc ggctggggct 240
 ccggctcgcc ggagaagatc aaggagctgc gcaccaagga gatcaagaac ggacgcctcg 300
 ccatgctcgc cgtcatgggc gcttggttcc aggccgagta caccggcacc ggccccatcg 360
 acaacctctt cggccacctc gccgaccctg gccacgccac catcttccag gccttcaccc 420
 ccaaatgagg agctctgatg aac 443

<210> 7630
 <211> 429
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-E2

<400> 7630

ccggtcctaa attaccgggt cgacgcacgc gtccgatgtc ttgcaactgc ggatcaagct 60
gcggctgcgg ctcaagctgc aagtgcggca agaagtaccc tgacctggag gagacgagca 120
ccgccgcgca ggccaccgtc gtctctggcg tggccccgga gaagaaggcc gcgcccgagt 180
tcgtcgaggc cgcggcgagg tccggcgagg ccgccccacgg ctgcagctgc ggtggcaact 240
gcaagtgcga cccctgcaac tgctgatcac atcgatcgac gaccatggat atgattatta 300
tctatctagc ttgtggtggt ggttgaacaa taataagcga ggccgagctg gctgccatac 360
ataggtattg tgtggtgtgt gtgagagaga gagaaacaga gttcctcagt ttgctatctc 420
tctctgcat 429

<210> 7631

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-E5

<400> 7631

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tctgtttgcc gtaggtgtgg ttctcgtcaa aggttaccat gacaagtgtg ttgtgcatgc 120
agttcttgtt ggtaaggagg ggttccacga gcaacgcact tacggcatac atgacggcgt 180
cttcagcatc gttcccggag atgctgttcc ggctgcgcgg gtcggtacca cgaatgatgc 240
ctactacaac cagtacagcg agatctctaa tgcacaagcg aattgcgggt tgcacacatc 300
aggccgttgg gacgtaccgt gcaccatgtt catattcgta gctacgaata ctgtgcatac 360
tgttgcagca tgggtctggga aggttgtctt cagcactacg tacatcactg cgtcggacac 420
t 421

<210> 7632

<211> 451

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-E8

<400> 7632

cccacgcac cgaatgggtc aaatagccga acaagagcca gcaaattctg tctgggtctag 60
cagttaccat gtgtgattca gtaacttgta ccaggatgat tgctggagtt gctggggact 120
attggattaa gtggcacagc ctgatctatt gagcttggcc catacctgca gcactctgtt 180
aaatttcttt tgagcatggt ggtctttgaa gcatgacaat ggctgctctt aggtttggga 240
ttgccaccat cttctgggac aaagagggag tggaggatga ttgatctgtc ggcagtctga 300
tggggatgaa ttatacgagg tcttcaacgc tgacacaaag ggtaaatgaa acaaactcga 360
atccagtgat tataggcgct ccgcacggac catatgattc atctcccctt ggacatgtag 420
ctacaagaat ggtgtcagtg ggccgttgct g 451

<210> 7633

<211> 451

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-E9

<400> 7633

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aagatggcgc tgccatccat gagtcttgcg gcaaaggggtg tgcttccctt ctcagcacgt 120
acctcgagtg gtgtcacaca aaggccgggtg tcagtgaccg cttccttgga gcacaaaacc 180
agcgatgcc a gaaggaagtt cctaaaactt gcacttgga accttgagtg tggactgccc 240
accttgttgg gcgctaagaa agctctcgct gatgagcaag gcgtctcgct ctcgaggatg 300
tcttattcga ggttccttga gtaccttgac aaggatagag tgaaaaaggt tgatttgttt 360
gagaatggga caattgctat tgtggaggcc atttctcctg agcttggtta cgcggtgcaa 420
agagtccgtg tgcagcttcc tgggtctaagc c 451

<210> 7634

<211> 325

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-F10

<400> 7634

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ctcagctgat gatgaccoga gggttgttgg agttgtaagc tgctgattct cgcggtcgcc 120
agctatttaa ctgtcttgta ttgagccttg agacaaagca agctttgtgt atcatgtgtc 180
gtcttgtttg ccttgctatg gaagtgtgtt tgtatcgga ttccggagtc ctattgttgt 240
catagtcgca acttctctgc ctttttacct ccggaagat gctcttgca ccaaaaaaaaa 300
aaaaaaaaa aaaaaaaaa aataa 325

<210> 7635

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-F12

<400> 7635

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cctcctggag gtgatggctg cgaacggctg caagaagctg gtgttctcgt catctgcaac 120
tgtctatggg tggcccaagg aagtaccctg caccgaagaa ttcccgtctt gcgccaccaa 180
tccctatggg cggacaaagc ttgtgattga agacatctgc cgcgacgtcc accgctccga 240
ccccgactgg aagatcatac tgctcaggtc cttcaacccc gttggcgctc atccaagcgg 300
gtacatcggc gaagaccctt gcgggtgtccc gaacaacctg atgccttacg tgcagcaagt 360
cgctgttggg aggttacctc acctcacggt ctacgggacg gactacagca ccaaggatgg 420
gactgggg 428

<210> 7636

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-F3

<400> 7636

cgggtccacc cgcgcgtccg aggacgcgtg ggcggacgcg tgggctccac tcctgagtc 60
tcacctcgtg ctgcccgcgc catttccacc tcccactgtc ctttcgtcca gtccccagcc 120

ctgcagccca accgtggagg ttctggaagg cgggtgtatcc cttctagaac cttctcgaga 180
 tgcagagcgc cgcggctttc cggccatgcc ccactcggct gctggtgagc agcccttgtc 240
 gccccctect ctcgggccgc ccgcttcgtg cctccgcgcg tggcgccgct gctaccagaa 300
 gcagcgccgt gggccctcgc ggtctggggc tcgggctgct gccagcctcg cccgatcggg 360
 atggcaagtg ccgccagcga caggtgtcat gcagcgcggc cggggatgct g 411

<210> 7637

<211> 467

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-F6

<400> 7637

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 gctgcgaca gacacaccaa gcgtcggcac caatggctta ctaccaggag gtggactact 120
 gctcggagga ggtgaggtcg gtggccccgg ccggcttcgg ccgccacggc ggcggcgctc 180
 agcagcacgt cgtcaaggag aagttcgagg aggtcgacac ggtctcacgc gccggcgcca 240
 accaccacca ccaccatggt caccacggcg gccacggctt cgtggtgcgc gagaccaggg 300
 tcgaagagga catcaacacc tgcaccggcg aggtccacga gcgcagggag agcttcctcg 360
 ccagggctaa ctgagccgcc cggcggcccg catccacgcc cgttcgtgct tgcttgcgtg 420
 ccttatgtat gtctgtgggt gactggttgt gcagggtcac cgtactt 467

<210> 7638

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-F7

<400> 7638

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 aatagggtaa cactacgaac ttggttcttg tttcttcttc ctaacggtgt gcagttctga 120
 tgcataactt tttttttttt gctttgttca ggtggcctta ccattttcta gacttgacat 180
 tccttgggtgc acctgtatgg taaggctgac tagacgaaac aagtgactct atttttgcta 240

aataccatgg tctcatgtgt agcttacgca ttagtttggc tctgtttgtt tacttccagg 300
 attatataat ccagcttagg gcctgttcgg ttagctctaa atccatgtgg attgagtggg 360
 tttgggtggg ttcaaattccc aaacaagtca aaattgttct caattttttc caatcccgtc 420
 caatccatag ctaacgggat taaccgaac 449

<210> 7639
 <211> 457
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-004-Q1-E1-F8
 <400> 7639

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 gtaccagctt gttcgcgggc gactgcaaga ggaaggctcg tcgcccggcg tgctcggcct 180
 gggccctcag gcagagccgg atcggcagca ggagcaggag caagaggggc ctccggcatcg 240
 tctgcaacct cgcgggacag tacgaggatt ctttcgacga cgtccagcgg caactgatga 300
 actacttcac ctacaaggcc gtgaggaccg tgctgaccca gctctacgag ctgaacccgc 360
 cgagctaccg ctggttctac aacttcgctg ctgtcaacaa gcctaccgac ggcaagcatt 420
 tcctccgtgc tctcggcaag gagaggcagg agctcgc 457

<210> 7640
 <211> 438
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-004-Q1-E1-F9
 <400> 7640

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 ccgtgccact ccagcagggg ggccggcctgt ccgagttctc cgggctcagg agctccgcgt 120
 cgctgcccatt gcgcgggaat gccacctccg acgacttcat gtccgcgcgt tccttcagga 180
 cccacgcggt cggcacgagc ggccgggtcgc ggccggcgcc gacggaggcg aagctgaagg 240
 tggccatcaa cgggttcggc cgcctcgggc gcaacttctt gcgggtgctgg gaacggcgcg 300

gcgaaccctt cgccctcgac gtcacgcga tcaacgacac cggcgggtgtc aaagcagggt 360
ccanctgtctc aagtagact ccacgtcgg gatcttcgac gccgacgtca agcccgtcgg 420
cgacaacgcc atctccgt 438

<210> 7641
<211> 409
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-G10

<400> 7641

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tgcaggcaat gctgttggtc aggacgatat gaacatggac atggaccag atgttagcct 120
gcctcaactg aaacaacatg gtccagaca ttagccgtc ttgtgttacc acaatggctg 180
tgactgtgag tatctttaca gttatgctcg ttatatccct gtggtgtacc tgtttcgatc 240
gtcttcgacc aaatgtcacg tcgactgcag tctccagttg ttaatacagt ctgttcagca 300
cgctgattta agtatttggg tcaagatgtt catataatcc tgtggtatcc agagatatta 360
tagtttgttt tcgtaactgt ttgcgcagag accatgctat gttgcctgc 409

<210> 7642
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-G11

<400> 7642

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agtgcctggc gtcggcacc aggttgctc ccaagtacaa gatcacctac cagttctacc 120
gcgtcttccc caacggcgag gtgcagtacc tccaccccaa ggacggcgtc taccggaga 180
aggtaaccc cggcaggag ggcgtcggc agaacttccg cagcatcggc aagaacgtca 240
acccatcga cgtcaagttc accggcaagg ccacctcga ctaatcacac ttcacgtacg 300
ccgcacgcc cagccgggat ccaaattaa gaacttctt ttctattaat tacagtatat 360
tgtaatttgg ctgctggtac ggtggtggca tgatttgaga tgtgcatgat gatccttgtg 420

taattttatt acca

434

<210> 7643

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-G6

<400> 7643

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actctgcagc ggatgatctc ataataaggt aacactggca ttttggtaac catagacgaa 120

taagaatgag ggaaatttca gaacatgttc cggtgatact aattagctag aggaaaattt 180

gacacggaaa gttccttatt ctgtagaatg tgcctttgtg gtgagtaaag atgtccattt 240

catatggcct ttgtgatgag tatgtctgca ttgaaaagtt agtgctttca ttcttgataa 300

tggacacttc gatttgattc aaaaaaaaaa aaaaaaaaaa aaaacaaaaa aaaaaacaaa 360

<210> 7644

<211> 445

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-004-Q1-E1-G7

<400> 7644

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ccgccagtgg gtgcctgccg accaggtctc gccaccgccg ccgccgccgc ggtagagagg 120

ggaggagag ggagagggag aaaaaactgg ccagatcga gaggtacagc acgaaaaaga 180

gaggcaagag agatagggga ccggagggcg gcgggccggg gccaagacc gaggggctcg 240

tgcgaggaa gctgatgagg ctctgtcgc tcgtcncctt cggctgccgt gctggacca 300

tcgacgacgc gccgccgcc gtggaccacg ctgccgccgc ccgccgagg aggcgccgga 360

ggaggagggc caacagagcc gccagctgc tgggggctgc tgcgggtgcg ccgcagcagt 420

ggcgcccctc gctcggcgac atctg 445

<210> 7645

<211> 290
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-004-Q1-E1-G8

 <400> 7645

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 aagggggacg cggaggaaga tggggctcgc gttcgggaag ctcttcagcc ggctcttcgc 120
 caagaaggag atgcggatcc tcatggtcgg cctcgacgcc gccggtaaaa ccaccatcct 180
 ctacaagctc aagctcggcg agatcgtcac caccatcccc accatcggtt tcaatgttga 240
 aactgttgag tacaagaaca ttagcttcac tgtctgggat gtcggggggtc 290

<210> 7646
 <211> 414
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-004-Q1-E1-H10

 <400> 7646

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 tacaaggaca acgcatgaat agcagctgca caaaaatata gtaaggctgc actgacattt 120
 aacacttacc atgaaagaaa gcaaaatcat gtaatccttc ttcagctcaa agagaagcaa 180
 tattgaagtc aatgggaatg aatagactga agctagtgtg gcagccattc tgacctacag 240
 aaaaatagag atagtgcaca tcattactta tcgcatcagg aaaagtgagt tgcaaagcaa 300
 cttaccagag cctaggcttg tggcagtgca acgacaacat taccctcagt aaagttgaaa 360
 ttattaaata agctaccgac gccctccaaa acagttccag cagcagctcc aatc 414

<210> 7647
 <211> 323
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-004-Q1-E1-H12

 <400> 7647

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 taaaaatcaa acttgaaagc aatacattga caatgtcata gaaggtgagg ggcacgtatc 120
 tatcttgaca ttgtctctcg tggtaggggac gcatgttctc ttctgtacga cgcaagcatg 180
 ctaacccgtc actaatctct gatcagttca attgtcacac ttccagcttg acgtcggcac 240
 gcaggtcagg tantggcacc agctacagtg atcgttgccg ttctctcctc tgaacaccat 300
 taacaatcca acagcgaacc ctg 323

<210> 7648
 <211> 439
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-004-Q1-E1-H3

<400> 7648
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 ggaggtggag gaccatcccc cgctaggcga aggagaggtg ctccctcagg tcgccgccgc 120
 gggcgtcaat cgcgcggaca ccgtgcagcg gatggggcgg taccgcgcgc ctgccggcgc 180
 gtccccttac ccggggctcg agtgctccg caccatcctc gcgctcggcc ccaacgtcnc 240
 ctcccgttgg gccgtgggcg ataaggtttg cgcgctcctc agcggcgggc ggtagcgga 300
 taaggtggtg gcgcggcgcg ggcagctgct gccgataccc gaggggggtgt cgctgacgca 360
 cgcagccggc ttgcccaggg tggcctgcac cgtctgggtca accgtattca tgaccagtca 420
 cctctcccc cgtgaatca 439

<210> 7649
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-H5

<400> 7649
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 aactctcaaa gacaaatatt cagttactgt tgtatatgac aatcaattct ttgcactccg 180

aaaaaagtgt tgcccatccg agcttgcata tattacttct ttaagccgct gcaagaagtg 240
 gaatgctcaa ggtggaaaga gcaaggccta ttttgtaaag acaacagatg acaggttcat 300
 cattaagcaa atcaataaaa cagagtttga gtcatttatt aaatttgcac ctgattactt 360
 taagcatggt taccattctc tggacactgg aagccaaact tgtctcgcca aaat 414

<210> 7650

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-004-Q1-E1-H6

<400> 7650

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 tggaagggtgg ggtgctgtac tctcggaac atggcgggca ccatggcgag ggtaacgtgt 120
 accaaccagg ccaacggctg gaagggtggg tgctgtactc tcggaacat ggcgggcacc 180
 atggcgaggg taacgtgtac caaccaggcc aatggctgga cggaggagta ctgtgctctc 240
 ggttggcggg gaccggttct ggtcttgaga aaccctgagg cgagttgaca tatgcaaggg 300
 ttaagtgcta catatgtcgt gtggttgagg atccccagct ggggtattaat cgattcggat 360
 cgccaaactc tcggatatga agactggatc ttcgaccctc atcctagata acaggtgaaa 420
 ctaaaga 427

<210> 7651

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-A10

<400> 7651

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 cggcgagggc cgcacacca tgcgcaagac cgtgggcaag cccaagggtg cggcgtccgg 180
 cagccccctg tacggccccg accgcgtcaa gtacctcggc cccttctccg gcgagccccc 240
 gagctacctc accggcgagt tccccggcga ctacggctgg gacaccgccc ggctgtccgc 300

cgacccccgag accttcgcca agaaccgga gctggagggtg atccactccc gctggggccat 360
gctcggcgcg ctcggctgcg tcttccccga gctgctctcc cgc 403

<210> 7652
<211> 353
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-A2

<400> 7652

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ctgcagaagc atgcgcttag tcgttatttg cagacgataa taagtagatc gatggagtag 120
tgatcgagca acacacacgt gacgacgttt gctcttattt acttacacgc acgcacgtgt 180
acggcgctag gggccgtata tatatcgagt tctgcatgca tatctcgatc gatgggatga 240
tcagtcgttt cagtcgcagt agtaggagta gccgtgcccg tgcccgtgcc cgtgcggcac 300
cctgtgctcc tgctgcctgc tctcgtagtg ggctccttc tgctcgcggt gct 353

<210> 7653
<211> 378
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-A3

<400> 7653

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tctgcgcacc aaaatgattc gccctgggta ccgatctggt ttcttcaatc ttttacatac 120
ttatatcgag tttagagagg aatattaaca tgaataatgt ggtaactgac tgggaaattc 180
aaaccgtggt caccaactat ttgccgtac tgttcttcag gaaagtcaa tacattgtac 240
ataaccatgc atcaaccatc agtcaagac taaaggctct cctgcagtat tgtggtgcac 300
tgactattgg tctatttctt tcgaaagaga gagagaggaa agctattagc tagtgctaga 360
aatataatgg tgccccac 378

<210> 7654
<211> 427

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-A5

 <400> 7654

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 gcagagcagg gtgtggaagg tgtgctgtgta cgtcatcacc ctgggcatgc tgggtggcgct 120
 gctgctgggc ctcaacatgt cgtggagcgc catcacgcg gccctggcgc tcatcgtgct 180
 ggacttcaag gacgcccgc cctgcctgga gaagggtgctg taccgcgtgc tgctcttctt 240
 ctgcggcatg ttcacacccg tggacggctt caacaagacg ggcaccccca gcgcgttctg 300
 ggacttcatg gagccgtacg cgcggatcga cacgcccacg gggacggccg tgctcgcgct 360
 cgtcatcctc ctgctctcca acgtcgcgtc caacgtgccg acggtcctgc tggctggccc 420
 cccccctt 427

<210> 7655
 <211> 416
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-A6

 <400> 7655

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 tgctcctcgc cgcggcgctg ctgcgcgcg tcgctgccgc ggcggtgccg ccgacgtgcg 180
 agcgcacga gtgcccggcg tacgaggtgg tggacagcgc caacgggttc gagatccggc 240
 ggtacacgga cgccatgtgg atcaccacgg cgcccatcga ggacatctcc ttcgtgcgcg 300
 ccacgcgac cggttctcta cagctgttcg actacatcca gggcaagaac gcgtacaacc 360
 agacgatcga gatgacggcg ccggtgctga cgcgggtgtc gccagcgcg gggccc 416

<210> 7656
 <211> 384
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-A7

<400> 7656

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gctctcgcaa cgcaagcaca cgcccggccg cctgccacag ttgccatggc gaccatagcc 180
acgatggcgc tgctgaagcc cgccgccaag gccgcggcgc ggctgggcgc gtccaccagc 240
agcggcagcg tctcgctgcg cgtccggacg gggcaggccg ccaagaaggc tgcgtgtcc 300
gtgtccgcgt cgtccacgct ggccgggcgc ttcctcgcg cgctggcgtc gtcgcccagc 360
gctgcgctgg cggacgtggc ggcg 384

<210> 7657

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-B10

<400> 7657

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ggaatgcccg cgttcttatg acaaactacg gttcgaccca agccatcctg attgcaagct 180
ggttgttagt catgatgact atagcttaac ttccaagctg ccaagggaga gaacatctgt 240
tgtaacaata ctaaggaacc caattgaccg tgtatttagc acatatgagt ttccagttga 300
agttgcagct agattccttg ttcacccaaa cttaacttct gcaaagttaa tgactaccg 360
tgtgttaaaa aagtctcgtg ctgtcagtag tttggacatc tgg 403

<210> 7658

<211> 78

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-B11

<400> 7658

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aaaaaaaaagaa aaataaaa 78

<210> 7659
<211> 401
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-B9

<400> 7659

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cgacgagctc aacaagcccg accctataat gaacgagaac atcgcggttg acctgttggt 120
cctgtctctc ttcgcgagcc acgagacgac gtcgatggga ctgaccgga tactcaagtt 180
cctcacggac aacccaaagg ccctgcaaga attgaccgag gagcatgaaa aaatcgtgga 240
aacaaggggtg gatccggact ctgatatac ctgggaggag tacaagtcta tgagattcac 300
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ggcaaaccaa gacgtataca taaaggggta cactatccca g 401

<210> 7660
<211> 413
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-C10

<400> 7660

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gcgccccgga caccagcacg tacaacgtgc tgggtgaacgc gtacgggcgc gcgggggtacc 180
tggaccggat ggaggcggcg ttccgctccc tggcggcgcg gggcctcgcc gccgacgtgg 240
tgacgtggac gtcccgcac ggcggtacg ccaggaagaa tgagtacggg cagtgcctgc 300
ggatcttcga ggagatgggtg gacgccgggt gctaccgga cgcggcacc gccaaaggtgc 360
tgctcgccgc gtgctccgac gagcgccagg tggagcaggt cacagccatt gtc 413

<210> 7661
<211> 347
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-C12

<400> 7661

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ctcatcagct ctctatctga gcttcgtttag caaataagtt cagacttctc tttactgcca 120
tgctcaagtc tgtatatggc caaaacccaa aacgattgat caactgcgct actgcagtgc 180
aatagcagga tacgtatagt tttcttttca agggaaacag gaggggagtg cagtgcaccc 240
ccgcccatat tgcagtgttat taataaaaga aagttattta cagaaaaaaaa aaacatcata 300
aaagccagta aaaaaaaaaa aagaaaaaaaa aaaaaaaca acaaaat 347

<210> 7662

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-C5

<400> 7662

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cgacgaagac cccgctagct tcgtcccgcc gattccagtg gccagcagca tctccagcga 120
gactactgcg gtgttagggc agggacgacc gctaccggtc gccgtggtga tcgatgtcat 180
caccacagcag gaggaagagg cgcgaggca ggaggcactg gagctgcagc agatagggac 240
ccagcggcga gccatgcggc ggtcgcggtc ggggcgcaag ccggttccga cgcagctcgc 300
ccggtcgcac tctacgggcc actccctcgc cgtccggctg gaccgcgacc tggagcgctt 360
cacgctgcgg ctgccggagc acgtgcg 387

<210> 7663

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-C6

<400> 7663

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gactttggag gagatactct atgctctggt tgttcagaag ttcggtgaag ctggtgtctc 120

tctggttcca gcactctcac gctccaccga tccttctgga agagttgatc agtgggcaga 180
aactgtggaa gaaaagcttc aacgtctgca ctgcgatgag gcctatgaaa tgatcgagaa 240
tcacctcacc ctcatctctgg ggcagcgtca aggtgacgcc actatcgag ccataagtaa 300
gctccgtggt ggccaggtct atgctgcac tgtgatgtac gggtatttcc tgaagagagt 360
tgaccagagg ttccagctcg agaagacaat gaagggcctc ccttgggggt cagaag 416

<210> 7664

<211> 455

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-C8

<400> 7664

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acaccaacac ccactgccgc cgttttgctc gcgcgccgc tcatcgact gtccagtgt 120
ttcacctccc ctcatcgtgc gggggtgcc agcgggtccct cctccatctc ggtgcgccca 180
ctgaggagtc gatggtgcc gtggcgccgc ccgtccgat cgtgcccc cgaaggatct 240
ccggccgagc tgatggaaga ggactccaag tttgtgcgt tgaacgcgga cgatcccatg 300
tacggccac cggcgtact gctcatcgga tttgagaaag gcgaaactgt cacgattcag 360
gccttcctga aagagcttga aggtgaattc ctcaagggtga tccattgtac agaggagatg 420
acaaagcaaa accttatggg atgccatgca cactg 455

<210> 7665

<211> 332

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-D12

<400> 7665

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ggataaactg ctggacaagg tctaagataa gtgctgcgtg gtggcaaca acgacactta 120
gtcttgtttg gtggcaatga tattggagg gctaaagttt tttcgctcct aaacaagctc 180
ctaagaatct tacgtgttat gttgcattat ggaatatcta tgtatctgca aactctctgt 240

agtctgtatg tacctcggat gtgctctatg tggctttgta attctgaacg gaggaagtaa 300
taataagata aatggatggc gtaacaagat at 332

<210> 7666
<211> 393
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-D5

<400> 7666

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gaagggttgaa catcaattca aaaatggact agcagagAAC agaatggatt ctactgagga 120
caacaaaaaac ttctgcaaaa gcaaaaaaag cacactggag aaaggtagaa ccagtgaagg 180
tctatcttat gctcagaacc acgaaaccaa ggtccatgat tctgcacgtt ctcaagaaaa 240
aaatcccaag gatgaaagtg atgggcacaa agatttggac caacagaaga ataatgccac 300
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ttttgatcac aaagcattgc tagaggaatg gat 393

<210> 7667
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-D8

<400> 7667

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tgtgaaagtg acctatgcat ctgcgcgggc cctgatgat cttgacacga gacttctccg 180
tgcaatgata accaagggat tgattgaacc aatctccagc gtttttgtca atctggtaaa 240
tgccgacttc accgcaaagc agaggggagt tcgcatcacg gaggagagga tcctgctgga 300
cggctcacct gaaacaccta tcgactacat tcaagttcag attgccaatg tcgagtccaa 360
atttcccagt gcgatatctg agactggaga aatcactgtg gagggcagag tgaaggatgg 420
tgttctcat c 431

<210> 7668
 <211> 429
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-E1

<400> 7668

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 ccaccgccc ctccgtgccc tccgggacga cgcagaggcc gtctgcccag ggcccctcc 180
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 tcaagaccaa atatcaactg gcgcacatct ccgctggaga tttgttgcg gcgggaatcg 420
 ctgctgggt 429

<210> 7669
 <211> 359
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-E10

<400> 7669

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 tagcctccct gcaccctttc cagtcttcca caaaatcgt gctgctgcca ccacggaccg 180
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 gcagcacgga tgacgccc aaacctgaaac aagacaaggc gccgttcggg tacacgagga 300
 aagacgtgct gctgatcggc ctccggctca ccgccttcgg cgtcgggctc aaatacggg 359

<210> 7670
 <211> 410
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-E12

<400> 7670

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gacgagaact gcacggtcta catcgacgcc gcgcccggta aggacgaact ggtctacagg 180
gtggaccgga gcggcgggtct ggtgaacgct gagacgggga tgaagtcgga catcctgatc 240
cagggtcccca ccagctccac caggagcgcg gctgcgcagg ccgtcaagaa gatgaggatc 300
atggaggagg acgaggacgc catggacgag gagtaaaagg cgggccggag gacgcggagc 360
tgcgcccagg ccgcaggtct ggccgcccga tcatcgagtg tcctttgaat 410

<210> 7671

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-E5

<400> 7671

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cggacacgga ggagcagtac gacttcgacc cgctggacga caccaagacg tggccggagg 240
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tcaacgagaa cgagcagctg gcgttcgggc cggggctggt ggtgccaggg atctactact 360
cggacgacaa gatgctgcag tgccgggtgt tcgcctacgc 400

<210> 7672

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-E7

<400> 7672

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gctccacccc gaccgaccta tcctaatacgg cgatggcgac ggtggcgatg gacatctcga 120
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gagggggcga ggggctgcgg cagtactacc tgcagcacat ccacgacctg cagctccaga 240
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gagttagaat gctcagggaa gagttgcagt tgcttcaaga gcctggctca tatgttggtg 360
aggttgtgaa ggtcatgggg aaatcg 386

<210> 7673
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-E9

<400> 7673

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tcctttcaaa gatggatctg gtctccaaca aaaaagatgt agaagagtac ctggaccoga 180
atgcacaggt tcttctttca cagctgaatc ggcagatggc acctcggttt ggcaagttga 240
acaagtgttt agctgaactg gttgatgatt acagcatggt taatttcatt ccacttgatt 300
tgagaaagga aagcagcata caatatgtgc tatcttctat cgacacatgt atccagtatg 360
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<210> 7674
<211> 397
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-F10

<400> 7674

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ttccagcgtc accaggtcca gctgtcgggg ttccagcgt agaacagtcc atcgtggccc 180
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aagaaatcgt gttccgagga ttctttctcc cgtctctaac acggtacatg ccactcccat 300
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 tgccgctagt gtttcttgga gtggtgatgg gaggagt 397

<210> 7675
 <211> 400
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-F11
 <400> 7675

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 caaggcttca agaagaagg agcgcgccga gagggttctt gaggaaggt tggctgccga 180
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 gctctgcaact tttgtcttct ggagatggag ttattcagtt cacagcgaac gaataatacg 360
 atgttcttag tttctttttt ttttcccgct tctttgtctg 400

<210> 7676
 <211> 460
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-F2
 <400> 7676

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 aatattttgc ctcttatgc tcttgggtct ttctgcaagt gctgctacgg cgaccatttt 120
 cccgcaatgc tcgcaagctc ctatagcttc ctttcttccc cgtacctct caccagcgg 180
 gtcttcggta tgtgaaaacc caattcttca accctacagg atccaacagg caatcgcagc 240
 tggcatctta cctttatcac ccttgttctt ccaacaatca tcagccctat tacaacagtt 300
 acctttggtg catttattgg cacaaaacat cagggcacia caactacaac aacttgtgct 360
 agcaaacctt gctgcctact ctgagcaaca gcagtttctt ccattcaaac aactaaggt 420

caattgaact cggcttctta tttgcaacaa caacaactac 460

<210> 7677

<211> 456

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-F4

<400> 7677

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caggtggcgc cgcgtccgag cacgttctct cgttttgggc acggcgtgca cgcgtgcccc 240
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aggtgcgtcc atctctctc agatctctc catatattcc ccgcttgctc tatagcttgt 360
ggaccaggat gacacatggc tggctgctgc cgctctccat ggggctccgg ctctctctct 420
ccgtgaatgc tccaaatctc ctctgtctg tatgta 456

<210> 7678

<211> 461

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-F6

<400> 7678

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tagagaggct agtaggtggt cctcgaacga agatgttggc ggtgttcagc gggcagggtg 180
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gcgaccacgg ccacctcgcc tactcccaca ccaaccaggc gctctctcgc cccaggctcgt 360
tcgcggccaa ggacgaggtg ttctgcctgt tcgaaggggt gctggacaac ctgggtcctc 420
ctgaccaaca acaacgggct gtcaagcaag ggcgccaacg a 461

<210> 7679
 <211> 462
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-F8

<400> 7679

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 catgtccttg ggcacctget ggctctctcg ccgctgctgg cgtccgcctg ggaccgctgt 180
 acgaccgcca cageccgaggc gcccggttc gtgcacggag aggacggcgg caaggtgtac 240
 gtgggggttct cgggggtgca ggccgcgctg tctgcggcag gcgcggcggt ggccggtggt 300
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 ccgctgctcg cggccgagcc cgactcgctc gctgctgggg agccggttgc cgttcagggc 420
 cctggccctg cattgcttct tgaaactctg cggtaacct ga 462

<210> 7680
 <211> 413
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-F9

<400> 7680

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 aaaatgaatt aggtcttcag atattaagat atcaatgaat aattttgaat cagacttcac 180
 tattgttccg atgggtctca ctgctgtacc ttttaactga aatcttctgc tgtttctcag 240
 acatgatatg gcagcatgag gagttgtttt atcagtttagc atatatgcat gtgggttcaaa 300
 aattgaaata tgctccttttg ttctcaggat gaacactttt actgattgtt taagttggaa 360
 ctattagtag ccaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaccccaa aaa 413

<210> 7681
 <211> 393

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-G1

 <400> 7681

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 ctggacctga gcaacggctc ggccccgctg ctgtccacgg cggcgcaggt caccgtggcg 180
 tcccgcaacc ccaacggccg cgtcggcgtc tactacgacc gcctcgacgt ctacgccacg 240
 tacaagtacc agcaggtgac gctggcgctc aggtgccccg cgggtgtacca gggccacggc 300
 gacgtcgacg tctggctgcc cgtgctggcc ggccccgccg tccccttcgc gcccttcctc 360
 gccgacgcgc tcgccaagga cctcgccgcg ggg 393

<210> 7682
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-G12

 <400> 7682

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 acagaatggt cattgggtca gccaggtctt tcaggatttc agccacctca ctgccagttc 120
 taagtgtgta tggacaacga agggagaaca actctgacga tgacagtgca tcatcctagg 180
 acagcaaggc tgagggacaa atcaccaagt cacaaaactg aattttggat ggagcacagc 240
 acatcagcta tgccattttt agctgctgaa gcggatgtcg cattggcatt tgccccgagg 300
 cacatgttta aggttgggag gacgaaggtc gggagggggg ggtatacttt tggatcctgt 360
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 c 421

<210> 7683
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-005-Q1-E1-G2

<400> 7683

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gtgctgctct tgttggtggc tctatctcgt cttttggaat caaccatgaa ttactccga 120

tgggtgtacc tcttctcgtc agttctgttg gtattatagc atgtctcata acaacgctgt 180

ttgcaactga tttcttcgag ataaaggctg tggatgaaat agagcctgct ctcaagaaac 240

agctcataat ttccacaatt gtgatgacca ttggcattgc actaatcagt tggcttggtc 300

ttccatacac tttcactatt ttcaactttg gagtcagaa gacagtgcaa agctggcaat 360

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<210> 7684

<211> 338

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-G4

<400> 7684

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ttgccgtacc ctagctatag aggaattgtg tattgtctgg gggcatatag tttgagattt 120

tgttttgtgc cacacctgtg ttactagtat aagctttggt acaaaggaat accgaggcct 180

aagctcacat ctactacatg aatgggtgtaa tattgttgaa gatagaaagc atctaattgtt 240

cgggtggttt ggctatggtt tcggttatta cgacacaaga ttattgtgac aaaaagtgtg 300

ttttgagaga taatagagct catatctagt acattttg 338

<210> 7685

<211> 464

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-G5

<400> 7685

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ctagggttagg agctgaagca cctggtgaag caaacatgcc tctaccttcc gatgttgccg 120

tgataatgta cacaagtggc agcacccgat tgcccaaggg agttatgatg acccaccgca 180

acgtcctggc tacactctca gcagtcatga ccattgtgcc tgcacttggc agtaaagata 240
tatacttggc ctaccttcca cttgcacaca ttcttgagtt ggcagcagag gcactaatgg 300
ctgctgttgg ggctcaata ggatatggat cacctttgac cctgattgat acatccaata 360
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<210> 7686
<211> 461
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-G8

<400> 7686

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gatttgattc caagaatgct agttgtcgat cctatgaagc ggatcaccat tcgtgaaatt 180
cgcgaaacatg attggttcaa aattcttctc ccgcgctatt tgactgtgcc tcctccagat 240
agtgcgcaac aagtcaaaaa ggttgatgag gaaactctcc gtgagggtttt aggtatggga 300
tatgacaaga acctgttggg ggaatcaatc caaaaaaggc tgcaaaatga ggcaactggt 360
gcatattact tactcttggg caataggctc cgtacaacca gtggctatct tggagctgaa 420
tgtcaagaaa ctatggcaca taggactcct cattctcaaa c 461

<210> 7687
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-H10

<400> 7687

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acgttctcca agcgccgccg cggcctcttc aagaaggccc aggagctctc cgtgctgtgc 120
gatgccgacg tcgcgctcat cgtcttctcc tccacgggga agctctccca gttcgccagc 180
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gaacagcctt cgctggactt gaacttagag catagcaa atgcaaattt gaatgagcaa 300
 cttgcggaag caagccttcg actcaggcag atgagagggtg aagaacttga gggattgaat 360
 gttgaagaac tccagcagtt ggagaagaac ctggaatctg gtctgcatag ggtgcttcaa 420
 acaaa 425

<210> 7688
 <211> 424
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-H11
 <400> 7688

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 atccagctgg aagaattcat caccgeggct catttgctcg aacaaccac aatcacacgg 120
 gggtcgcgag tcaagaccga tcagttaagg ccacacactg aagtggatcc attaacatcc 180
 accgcttatt tacaccatta gcattgtcca ccagtcgccg atatctctca tattatccat 240
 gctgccatct tgacaccgga tgagttgttg tcattctacg cgcacactgc gccaacgca 300
 ggtatccgca tacaactgca acaattgcct aaattcagga accgtacatt cgaattttca 360
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 aaat 424

<210> 7689
 <211> 421
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-H12
 <400> 7689

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 ggttagaaaa actcaciaag gagagttcca agttgaagtt gaagagccag atggtttctc 120
 agtggaggtt gaacttggga gtaatgttac taacattcca taaaagctg ttgaagatca 180
 gacaaagtct aatggaacag atggtaaagt agatgttgaa gaaaaggaca aagcatctga 240
 tagcgcttca cacaatgagg atggcagaac aggcaacaat ggtataccag gtgatgtaga 300

atgtatcgat aatgagaaag ctgatctcat gcaggaactt atcttggatg atgtgaagga 360
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 g 421

<210> 7690
 <211> 462
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-H2
 <400> 7690

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 gtactggcgc aacctccgcc gcgtcgccac ggtgcagctc ctgtccgcgc accgcgtcag 120
 ctgcatgctc cccgtcatat ccgccgaggt gcgcgcaatg gcgcggagga tgtaccaatc 180
 cgccgcgcgc gccccgcgcg gcgccgcgag ggctcagctg aagcggaggc tgttcgagct 240
 ctcccacagc gccctgatgg agaccatcgc gcgaaccaag acgtcccgtg ccgtggcgga 300
 cgacgacacg gacatgtctc cggaggccca ggaattcatg aaggcgtg acgtgttcct 360
 tccgcttctc agcggggcca acgcgtggga ctacctgccg gtgctacggt gggtcgacgt 420
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<210> 7691
 <211> 452
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-005-Q1-E1-H4
 <400> 7691

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 ccgccagat gttcccctac aacacgcccg tcaacaagga ggctactac taccggatga 180
 tattcgagag gctcttcct caggactcgg cgaggagac ggtgccgtgg ggcccgagca 240
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 cctccggccg cttcatctcc tcccacgact ccgccccac cgaccacacc ggcggtgaagc 360

cggcggtggc caacggcggc ggccacggcg cgcgaacgg caacgtcaac ggcaaagacg 420
tcgcagtcgc gatcgcggtc tgacgagagt ac 452

<210> 7692
<211> 310
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-H5

<400> 7692

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gtttagtggg acatagtcgt cggatatcta cagcatgtgt ttctgatgga gtgatatggt 120
tagtaagcag tgggtgaagga tacaggcata cgggcactgg ggcatatacc atacttttgg 180
actagaccgg ctagagactg attttggagt cggttatggt tccgttttcc gttctcttgg 240
ttttctctgt cgtcaatgta ttataatcat gatgatgaat ggagaaatga gatggatttt 300
ttttgagttc 310

<210> 7693
<211> 182
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-H6

<400> 7693

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aaaaaaaaaa aaggaggagc gcacaaaagg ataaaaagct tacataaaca tgaaagcaaa 120
agtcaatagc tcttcaaaaa tgtcaccaaa aattcaattc aatggggggg cctttttaaaa 180
ag 182

<210> 7694
<211> 420
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-005-Q1-E1-H7

<400> 7694

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 acagtatcgt gaacagctgc aatcatctac ttttgttatt ttgactggta tttctagttt 180
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 atttgaacat aggctttcat cacttcttat atcacatggt tgattcactt gtaccatctt 300
 ttgctgggta ttttctgtac taaccccaat caagtttaca aggtactgtt ctttctcata 360
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<210> 7695
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 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-A11

<400> 7695

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 aatactcaca agctcctata gctgcccttc ttcccccata ccttccatca atgaccgctt 180
 cagtatgtga aaaccagcc cttcaaccct acaggctcca acaagcaatc gcaacaagca 240
 acttaccttt atcacccttg ttctttcaac aatcgccagc cctatctttg gtgcagtcac 300
 tggtaaaac catcagggca caacagctgc agcaactcgt gctaccagtg atcagccaag 360
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<210> 7696
 <211> 458
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-A4

<400> 7696

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 cttctgcggc acgtggcg ggcagctctt cttcggctgg ctggcgaca agctggggcg 180

caagagcgtg tacgggatga cgctcatggt catggtcata tgctccgtcg cgtcgggcct 240
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cgccggcggc atcgtcacgc tcgtcatctc cgccgcct 458

<210> 7697
<211> 447
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-A7

<400> 7697

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cccgccgtag ctggagcact gatcggg 447

<210> 7698
<211> 391
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-A9

<400> 7698

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cacgtcgaag gaccgcatca agtacgagct tgacgggttc cactacgaaa tccaggcgac 180
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cttttgaagg gacctgtgga gggccgtgaa ccttcagcca gatgcaaatt caattatcaa 300
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<210> 7699
<211> 440
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-006-Q1-E1-B1
<400> 7699

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<210> 7700
<211> 432
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-006-Q1-E1-B12
<400> 7700

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gcgcctggac ccgccgtca agttccagta cgggcacgcc aagaaggacc tgctggtgga 180
gagccacgac gcggtgttcc aggtgaggaa aggcgagatg ctgttcggct accagccgtg 240
cgccaccaag gacccccgcg tggtcggcga caggccggg gacttcgtgc ccgaccgctt 300
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cgacaacccc agcgtcgaca acaagcagtg ccccggaag aacttcgtgg tgctcgtcgg 420
caggtcctc ct 432

<210> 7701
<211> 443
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B4

<400> 7701

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ccatttcccc aagccctaca cgagagaaag agagagaggg gggagcagag gagcacgcta 180
cgagagaggg aggtcgaggg agacagcaga ggctgcagca gaggccagaa gcattagaag 240
cggcagttgt aaccaagtgg catcagaaga tagagccagc catccgtcta tccatctatc 300
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tctttgaacg cagatttggt gcc 443

<210> 7702
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-B5

<400> 7702

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tcttcgtcgt catcctctc gcggcccacg tcttgccct cgtgttctgg atgtacaagc 180
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cggcgatcct tcgctagcct ctttatcggg tccattttca tgtgaaccag taccctccag 300
aacattcagg ccgtcaatta ttcagagata tccatatagt ctttcaattt gttttattta 360
tacttattgc attttgggta ttgtttgata acaacttagc gatattctat gaatcactat 420

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442

<210> 7703

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-C1

<400> 7703

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ctggaattga ggctcagatg ggtgtcttgc actatatttt gggcaattat ggcgagtcac 120
atgattcctt caagagtgcg attgcaaagc tccgcacctg tggtagagaaa aagtctgcct 180
tcttcggaat tgcctgaac cagatgggat tggcatgcgt tcaaagatat tcgataaatg 240
aagcagcaga attgtttgag gaagctagaa cagttctgga acaagaatac gggccttatac 300
atccagatac tttaggagtg tacagtaatc ttgctggaac ttatgatgca atgggcagac 360
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<210> 7704

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-C10

<400> 7704

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tcaaacagat cggcgtaatc ggctggggct cgcaggggtcc tgcgcaagct cagaacttga 120
gagactcact tggtgaggca aagtcagata ttgttggttaa gattgggtctc cgaaaagggtt 180
ctaaatcttt tgaagaagcc cgagcagcag gattcaccca agagagtggg acgctgggtg 240
atatatggga gactgtatca aacagtgate ttgttttgct actgatattc gattctgctc 300
aggctgataa ctacgagaaa attttctcgc acatgaaacc aaacagtatt cttgggtttgt 360
cacatggatt tctccttgga catctgcaat ctctgggttt tgatttcccc taa 413

<210> 7705

<211> 363

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-006-Q1-E1-C11

 <400> 7705

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 gtaatgaaca agcattaagc agtggatctc gtgaactcaa ccaaggatcc acaggcaaca 180
 ccgaagcgat tgaccactga aacgttggca aggaatagca aggatgatat ctcttgcat 240
 gtcacccgtt tccgctgctg agttaccctc tctcaacggc actgaaacc actcatcgcc 300
 tcatgattta gattgagaca atttgtcttt gcccaatttt ccgatagaat atgctgtacc 360
 tat 363

<210> 7706
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-006-Q1-E1-C12

 <400> 7706

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 caagaatgga agttctaaaa atccatgcag ccggtatcgc caagcatggg gagattgatt 180
 atgaagcagt cgtgaaacta gctgaagggt tcaatggggc tgatcttcgg aacgtgtgca 240
 ccgaagctgg catggctgca attcgtgcag agagagatta cgtagtccac gaagacttca 300
 tgaaggctgt gaggaaacta aatgatgcaa aaaagctgga atcgagtgcg cattacagtg 360
 cagattttgg caaagagtaa tgatgctgat gccgatgcaa cggacaaatg catttggcat 420
 g 421

<210> 7707
 <211> 455
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-006-Q1-E1-C3

<400> 7707

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aaaaagtcaa ggggtggtgt agaagagtca cagcagcaga aagttcaaaa aaataaaagc 120
aaggtgtctt cacggggccg caaaagaacc ttgaaggatg aaacggcaga gaagcctgag 180
aagaagctaa cccacaggat acgtcagagg ataacaaaag aggttaaggc tttactggaa 240
acacctcgtg agcagataaa acccatgaag ctaagcgcac cacatctcag gttgttacia 300
gaagctagag agcgtgttaa tccaaaaggg attccatccg ggccatcttc taatacaaga 360
aactttcaac tagatgatat ggatgatttg ggctacagag atgaggaaga taggtttctt 420
gacaacgata caacagagga gcatgtacaa aatgc 455

<210> 7708

<211> 447

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-C5

<400> 7708

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tggctgcaag cttagagtcc atgatgagaa cacaggaaca tggacaaggc tcatggacag 180
caagcaccac ttgggcagct cacgtgcctt tgaagctgca gctttggtgt cactaaatgg 240
gaaactctgt gtcacagga acaacatgag cataactctt gttgatgtct ccaaccaaac 300
aatgagtgtt gagacagata gtgcgcgcac gtgggaaact gttgttcgga agggccagca 360
caggctggtt gtggcgaact tatggctcag cattgcagga cggaacttaa agagtcacat 420
tatccattgc catgtgctgc aagtttg 447

<210> 7709

<211> 355

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-C7

<400> 7709

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 ctggctgcgg cgatcccccataaaaagagg caggggtgcga tgcacgcgg tcttctcgac 120
 tctcgagtgg tgtttgcgtt agacagccag ccactgtgtg gctagtgttc caacatttgt 180
 cagcctgctt gcgcgaggaa gtgggggtga ctgactcaag agaagggcct ggtcataggc 240
 tgctgcatta tgaatttctg atcatgtctt atgtctgtac tctgaatcaa ctatgtatga 300
 gatctcatct cctttctcct actgaatgaa tgaatcatta ttggcttgct taaaa 355

<210> 7710
 <211> 399
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-C8

<400> 7710

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 tggatgatgt atgtggccaa ccagaaataa gaagttacat ttccaaaaaa aaaaaaaaaa 120
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaggggg 240
 gggcccccaa aaggattcaa cccaaatttc ccgttaaagg aaatttaaac cctccaaaa 300
 gggcccccaa aattcaattc aagggccttt ttttaaaaaa gtcttaacgg gaaaaaccct 360
 ggctttacca aactaaaacc ccttggaataa aaacccct 399

<210> 7711
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-C9

<400> 7711

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 gccgtggccg aagacgtcaa gccggtgccg gcgcggcgcg cgtcgaagaa cccgcgtgcc 120
 agtggccgcg taggggcagc agcggcgggc ccgatgaagg tggagctccc cgagtacggc 180
 ggccgctact acgactacga cgacctggag acgcgcgtcg cggggatgct gtgcttcgac 240

cgcccgtcgg ccccggcgcc cgcgaccgc gactcaaaca actccgtgcc gtggacgacg 300
caccacacgc acacggacaa ctccagcagc ggctccgagc gcggtgctctc gccgtcgccg 360
gacctgcccc accgcgacca cgccgagagc cagccccgcc cgcgcggg 408

<210> 7712
<211> 439
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-006-Q1-E1-D1
<400> 7712

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cagcagcggc tcattttttgc cggcaagcag ctccaggacg ggcgcacgct ggccgactac 120
aacattcaga aggagagcac cctccacttg gtgctgcgtc tcagaggtgg catgcagatc 180
ttcgtgaaga cacttactgg caagacgac acccttgagg tggagtcctc agacaccatt 240
gacaacgtca aggccaagat ccaggacaag gagggcattc caccggacca gcagcggctg 300
atcttcgccg gcaagcagct ggaggatggc cgacaccttg ctgactacaa catccagaag 360
gagagcagcc tccacctggg gtcctgcctc aggggtggta tgcagatttt tgtgaagaca 420
ttgactggca agaccatca 439

<210> 7713
<211> 382
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-006-Q1-E1-D10
<400> 7713

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tccgagaatg gggcgctcg ctccatccaa gattctgggc acccagctca acttcgcggg 120
ctcctccgcg tacgccaccg cagcgcacc cgcggggggt cagaatattg tctccctttt 180
cagcaagaag cctgcccaag agcccaagcc cgctgcggta tcgtcgtctt ctccagacat 240
cagctacgag ctgcgaagt ggtatgggtc tgacatgagg atctatctgc cggatgggct 300
gtcggaccag tcggacgttc ccgattacct catcggagag gtcctgaag actatggcta 360

cgaacctttt ggctgggca at

382

<210> 7714

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-D11

<400> 7714

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tgagggagct caacaccctc aagggtcacg tggagtcggt ggtcaagctc aagggcctgg 120

acatcgacac catccagcag aactacacgg tgtgagagcc cctctgctgc gatgtcgacg 180

acaacacctt tgctgcccga cgggagccat ctgattacag ataaaaattt tcttagctgt 240

aaagctctat accaccagat actgccatat gatggtatgg ttgggtaccc gtctttctag 300

ggagtttctt ttctctctct cttttttcct attgttatgt ttttcaatag tggagtgtgc 360

gcgtgttgta atcgttttta cctgcgtttt t 391

<210> 7715

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-E11

<400> 7715

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cgcacggggc ctgcacacag acacaccaag cgtcggcacc aatggcttac taccaggagg 120

tggactactg ctcgaggag gtgaggtcgg tggccccggc cggcttcggc cgccacggag 180

gcggcgccca gcagcacgtc gtcaaggaga agttcgagga ggtcgacacg gtctcacgcg 240

ccggcgccaa ccaccaccac caccaccatg gtcaccacgg cggccacggc ttcgtggtgc 300

gcgagaccag ggtcgaggag gacatcaaca cctgcaccgg cgaggtccac gagcgcaggg 360

agagcttcct cgccagggt aactgagccg cccggcgggc ggcatccacg cccggt 416

<210> 7716

<211> 449

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-006-Q1-E1-E6

 <400> 7716

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 cgccgcaccc gcaccagccc gcgccgtggt cagaaggagg tccttcaccg tgcgcgcctc 120
 tctccgcaag gccaccggca ccgccgccgt ggcaatggct gccagcggcc tgcttgccgg 180
 cggtgccatg gcccaggagg tgctgctggg cgcaggcgac ggccgggctcg tcttcgagcc 240
 cagccagttc accgtcaagg ccggcgacac catcacattc aagaacaacg ccggcttccc 300
 gcacaacgtc gtcttcgacg aagacgaagt gccgagcggc gtcgacgcca ccaagatctc 360
 gcaggaggag tacctcaacg cgcaggcca gacctactcc gtcaccctca ccgtgccggg 420
 aaactacggc ttctactgcg agccgcac 449

<210> 7717
 <211> 458
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-006-Q1-E1-E8

 <400> 7717

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 gccagctcc gaggtgatct tccggcgccc gccgagatga gccgtggcac aggcgcgggc 120
 tatgaccgcc acatcaccat cttctcccc gagggacgcc tgtaccaagt cgagtacgcy 180
 ttcaaggcgg tgaagtcggc ggggtgtcacg tcgatcggcg tccgcggcgc ggactccgtc 240
 tgcgttgta cgcagaagaa agtcccggat aagttgctgg atcagacgag cgtgacacac 300
 ctgttccga tcaccaagta cgtcggattg cttgccactg gccttacagc tgatgctagg 360
 tcattggttt cccaagcaag gaatgaagca gctgagtttc gtttcaaag gggctacgag 420
 atgccagttg atgtgttaac aaaatggact gctgacaa 458

<210> 7718
 <211> 403
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-F1

<400> 7718

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aatcttatgg cacattcaga tatttttcaag atagagggtg ggcgcaatga agctgagaag 120
aattctatct cgaaaagggc ttccgtgttt ctgaaatgga tctggagaga gtgctacagt 180
caccaatcta catacgccat gagatatgga aagaagcggg gtcctgagtt gattcactct 240
tgtgattatt gctaccagat atacttagct gaagaaaggc actgttcttg ccacaaaaca 300
ttcaaacaca ttcaaatatt cttggaacac tcatcacaat gtgaagaaaa acaaagaaca 360
gateccaatt ggaagatgca aactgtggac ctttctgtac ccg 403

<210> 7719

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-F11

<400> 7719

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acgcgtgggc tgggtgtgta aggcagccta tgcgggtcaag gggactgctt gctcggcctt 120
atattcattc aatgcttgct atagcagcag tctgcgtatg cgtctgtgta ttcatgagag 180
ctttgctgcg gatcaattct ggaaaatcct tcaagtggga gaggctggat tacgggtacag 240
tataattgtg gggacacacc tgagccttgt ggtattatta agttaacagg cagttgttat 300
ggagctatct tggagccttg aagggtatgg agattgtttc atgcttcctc gagactcgcc 360
catcogtatg gctgagtgga ataattgta atttttgctg gacaattcct ttacttcctg 420

<210> 7720

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-F12

<400> 7720

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ccgatatgct gggatgcttc agtatgatgg tgagttgaag cttccaagcc gttaccttgt 120
 ttccccacca gagatagata gaacatctgg ggagtacttg gtgaagaatg gcatccgcac 180
 ctttgcttgc agtgagacag ttaaatttgg ccatgtcaca tttttctgga acggtaaccg 240
 ttctgggatac tttgatgcaa ctaaggagga gtatgtagaa gtacctagt acagtgggtat 300
 tacattcaat gttgcaccca atatgaaggc gcttgaaatt gctgagaaaag ccaggggatgc 360
 tctcctaagt ggaaagtttg accaggtacg tgtcaacctg ccaaattggtg aca 413

<210> 7721
 <211> 453
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-006-Q1-E1-F2

<400> 7721

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 tcgagtcatt gcttccatct ctggcatgct ccctaccgag atcacagccc tccgtgatgg 120
 tagactcatt catcttcttg ccaaggacct ggtgaacgga gatatcgctc aagtgtcatt 180
 aggtaacaag cttcccgccg atcttcgctt tgtcgacgtg tcctcggacc tgagactgga 240
 ccgctctgtg ttgaccggag agtcagagcc tatccaggga accatcgagc agacggacag 300
 caacttcttc gagagcaaga acgtcggact tcagggtaca ctttgtgtcg gcgggtccgg 360
 tacaggtgtt gtcattcaaa cgggcgatct caccgttttt ggtcgaatcg ctaagctctc 420
 atcctccggc gctccatcgn atgacactct gca 453

<210> 7722
 <211> 409
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-F3

<400> 7722

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 cctgaaaaaa tatgatggca ggtttaagga cattttccag gaggtctatg aagctgactg 120

gaagtccaaa tttgaggctg ctggaatatg gtatgagcat cgtcttattg atgacatggt 180
 tgcgtacgcg ctttaagagcg aaggaggcta tgtgtgggct tgcaagaact acgatggaga 240
 tgtgcagagt gatttcttag ctcaaggttt tggatctttg ggtttgatga catcagtgtt 300
 ggtgtgccct gatggaaaaa ccatcgaagc tgaagctgcc catggcacgg ttaccctca 360
 tttccgtgtc caccagaaag gaggcgaaac cagcacgaac aacattgct 409

<210> 7723
 <211> 445
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-F6

<400> 7723

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 tgctgatgaa gatcaatgca aagcttgggt gtctgaactc gttgctgcaa gttgaagcat 180
 cttcgtcaat accacatgtg tcgcaagtac ccaccatcat cttaggtatg gatgtttcac 240
 atgggtcatcc aggacaagat agaccttcgg ttgcagcggg ggtagttct cgtcaatggc 300
 ctcttatctc tagatataga gcatcagtgc acaccaatc tgccagacta gaaatgatgt 360
 cctcgttggt taagcgcggg ggtactgatg atgatggcct catccgggaa tcaactgatcg 420
 acttctacac tagctctgga aagcg 445

<210> 7724
 <211> 456
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-F8

<400> 7724

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 gtttgtccaa ccagggcagg atgtttacaa aggtcaaatt gttggtatcc atcagagacc 180
 tggtgattta gcaattaatg tgtgcaagaa aaaggctgct acaaatgttc gttccaacaa 240

agaaactaca gtggttcttg atgaaccttt aagctacagt ttggatgact gcatagagtt 300
 tatccaagaa gatgagatag tggaggttac tcctgcaagc atccgtatgt gcaagaacct 360
 aaaagtttcg aagaaaaagt aacataatcg catccatttg tcgtcaatgc atcttctaca 420
 catagaagct gcatgctccg ttgccaggtc tcgtat 456

<210> 7725

<211> 451

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-F9

<400> 7725

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 acgacggccc ctactggacc atgtggaagc tgcccatggt cggctgcaac gacgccaccc 180
 aggtgtacaa ggagctgcag gaggccatca aatcctaccc ggacgccttc caccgcgtca 240
 tcggcttcga caacatcaag cagacgcagt gcgtcagctt catcgctac aagccccggg 300
 gcagcgacta gaccgcgccc gccggccgcc ccccgccggc tagctagcta gctagctcct 360
 gcgtgagcta gtagctagtg ccatgcgtcg tctctgtcgt tcggttttgc ttccgggtcac 420
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<210> 7726

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-G10

<400> 7726

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 ctgagaagat cgggaagagg caggatcatga tcaggccgtc gtccaacgtc atcatcaagt 180
 tcctgacggc caagcagcgc caccgctaca ttggagagtt cgagtacgtt gatgaccacc 240
 gatcgggcaa gatcgtggtc gaactcaacg ggaggctgaa caagtgcggc gtcacagcc 300

ctcgctttga tatcagcgtg aaagacattg agggatggac tgcaacgctg ctcccgtcga 360
ggcaattcgg atacatc 377

<210> 7727
<211> 445
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-G2

<400> 7727

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tgcatgtccc tttttgcaca ttctttttct ccgctcaacc tgtgcataac tcatgtacat 180
acgctcgtgc cttttgctct ctggtcaggg cttgttagat gtattgtctt tggtttgatt 240
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atgtttctcc atactgtagt gaaaaggggc cggatgcccc tgggtctccc gagctgcttt 360
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agtcgttcgt tgtgtgcct tcttc 445

<210> 7728
<211> 73
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-G4

<400> 7728

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ccaaaattca att 73

<210> 7729
<211> 446
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-006-Q1-E1-G8

<400> 7729

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cacggggctg ttcctcagca ccctgctgct gggattcttc gtcagctccg cgctcgctgc 180
cgccgtgcac agggtcacgg ggcaccgcca cccctggatc gccaacgacc tcaacaaggg 240
ccgcctcgac aactttctact ggctgctcgc cgccgtctgc ctgcgcaacc tactagtcta 300
cctcgctgcc gcccgctggc acaagtacaa ggcgggccgc cccggcgccg acggcagcgt 360
caacggcgctc gagatggccg acgagccac gctccactga tccatccatg ttcgatcgat 420
cgacgaggca cgcgacggac gacct 446

<210> 7730
<211> 367
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-006-Q1-E1-H1
<400> 7730

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tcaactgtcac tggtagtggt agtacaacac aaccggcaca gatgggggaaa gaaaactgta 180
gtatcatcga cgagtttcaa tggaaatccc tcttaggcct gtagacgctg gttcggtttt 240
cgaagtacct ttcaacccta aagacctctc aaaagactaa aggcataatga tgagctaaac 300
gcctcttcag atcacagcag ctggcaaagg cgacatgatg tgcctccct actgctgaca 360
tcaccaa 367

<210> 7731
<211> 73
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-006-Q1-E1-H11
<400> 7731

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ccaaaattca att 73

<210> 7732
 <211> 272
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-006-Q1-E1-H5

 <400> 7732

 ctttgcggtgt cttttttggt cagaacatcc accctccaag tacgagtttc ttggttaaggg 60
 cttcaatata cggccacttt tttttaatta gcagggcacc agcttcgcga gttaaaaaaa 120
 tgagcagcct acaagtcacg cacgtgtcac tgggtactggt agtagaacac acccggcaca 180
 gatggggaaa taaacctgtg gcagcaacca cgagtttcac tggaaatctc tcctaggcct 240
 gctgagcctg gctcgggtttt cgaactacct tt 272

<210> 7733
 <211> 450
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-006-Q1-E1-H6

 <400> 7733

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 gtaaatggaa gaccccatgg atcgataatc caggtaagca aataaaaatc ctaactgctg 120
 attttgaatg aaaccacact taagctttta agatcaggcg ctgtcaactg tattattttt 180
 gcagagtttg aggatgatcc agatctttat gtgctgaagc ctttgaagta tattggaatt 240
 gaagtttggc aggtaaaagc tggttcagtt ttcgacaaca ttctgatttg tgatgaccct 300
 gagtatgcaa gaaagggttg tgaggaaact tggggtgcaa atanggaggc tgaaaaggaa 360
 gcttttgaag aagctgaaaa ggagaagaaa gctanggaag atanggaagg tcaaaaggca 420
 naggacgatg gtggccggca tcgaatacac 450

<210> 7734
 <211> 444
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-007-Q1-E1-A10

<400> 7734

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cggttcagccg ctctagaacc ctagctcccc gccccgagag atggccactg ccgacggcga 120
gccccagccc gtggccaccg accccgcccga ggtccaggct ccggctccgg caccggcacc 180
ctacccctcc ccggccaagc gcaagcccga ggcggatgag gaagccgacg ccaacctcgc 240
gccccctaaa gccgcgcgtc ccgacgtcga cgaggaggcc gccgctatgg ccgaggctgc 300
caaggccagt gctcgcgcgg ctgacaaggg taagggcaag atggtagtcg aggaggagga 360
ggaggaggag gaagacgaca gcgaggagag cagcgacgac gacgaggggc gcggccgcgg 420
cagcagcagc gatgacgacg agct 444

<210> 7735

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-A12

<400> 7735

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ttcattaaga atcctgtaaa taaaaatgat tatcttggag aatatactgg tgaattgatc 120
tctcaeaagg aagcagacaa acgcggcaaa atttatgacc gggcaaactc atcttttctg 180
ttcgatttaa atgaccagta tgtgttggat gcttatcgca agggggacaa attgaagtcc 240
gcaaatacact catctaacc caactgctat gcaaaggatga tgctgggtggc tggcgaccat 300
cgggttggtg tatatgcgaa ggagcatatt gaggctagcg aggaactctt ttatgattat 360
cgttatggac ctgaccaggc tccagcttgg gct 393

<210> 7736

<211> 408

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-007-Q1-E1-A2

<400> 7736

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 acccagccgt gctgttctt ggacccggcg ccggtggaga gggaggaagg ggagcgggag 120
 cggagctgct gctcccgtc gccgcgctcg gtgctggcgg gctcgggtt cgacttcgac 180
 ctcaacctgc ctccgccgc cgagatggtc atgtagcgtt ggagatagta attctagcaa 240
 aaagggattg tgtagtaa at aggaagggca atcggtttgt gtagtactac tggccagttt 300
 gcctgtgcac tagccactag ccaatttgcg acttcgcaat gcaaagcang aaatgaatcg 360
 acgggcacat attttttccc cccctgcnn aattgcagt ggcattggc 408

<210> 7737
 <211> 353
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-007-Q1-E1-A4
 <400> 7737

gggccgagcc acgcgtccac ccaaacgtcc gccacgcgt ccgaagcaac atagaaagtg 60
 gaatcagtag caacaataaa agaacaaatg gcgaccaaag atattttccc tcttttaggc 120
 ccttgctctt ttcaaagtgt ttgctaacgc gacaattttc cctcaatgct cacaagctcc 180
 tatagcttcc ctttttcccc cataccttcc atcaattata gtttcaatat gtgaaaaccc 240
 agctcttcaa ccatataggc ttcaacaagc aatcgagca agcaacatac ctttatcgcc 300
 cttgttgttt caacaatcgc cagccctatc tttggtgcag tcattggtac aaa 353

<210> 7738
 <211> 279
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-007-Q1-E1-A6
 <400> 7738

ggtaacggtc aggaattccc gggccgaccc acgcgtcagc ggacgcgtgg gcggacgcgt 60
 ggggccgaag gaagttttga acttctgatg ttgtatatga atcaatttgc cttaaactcg 120
 cgaggggaaa agaggagaaa aatggtaaaa tatggacaga attcgacggt atatcatgtt 180
 atattgtacc tacctacatg acatgggaca tgaaataggg ctgagacatg cgctatggaa 240

cttgggaatac acacaaacct aacacgccac atgctgcac

279

<210> 7739

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-A7

<400> 7739

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gctcgtgccg tccactctcc cccgagggcat tctcttgctg tcgctgctcg acatggcgct 120

ccaggcgggcg acgtccttcc tcccctctgc cctctccgcg cgcaaggagg ggtcggtgaa 180

ggactcggcg tcgttcttgg gtgttcgtct cgcggcgcat gggctcaagc tggacaccac 240

cgctctgggc ctacgcaccg tgaggggtgag caggctggcg gacatccgcg cgcagacggc 300

agcgggtgtcc tccccgtcag tgaccctctgc gtgcgcgtct ggcaagaaga ccctccgcat 360

tggcacggcg gtcattcatg gcgcgtcgtc cggcctcggc ctgccacgg cg 412

<210> 7740

<211> 378

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-A8

<400> 7740

aattccccggg ctgacccaaa cgtcagaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaagaaaga cgaacaaata agataaaaac ttaagtaaac ataaaaagta aaaaaataaa 120

tcttcaaaaa aaaaacaaaa aattcaattc gggggggcgtc ccataaagat tctacattaa 180

tgtgaccgtc atggagttat caaacttatt caacttgac accaaattcc atttcactag 240

gtgggtctttt taaacattct gaacggaaaa atcctgggtc taaccaattt taaccctttt 300

gtagcaaata ccaactttccc aatatcggtt tatatgacaa aggcgttggtc gtttgcctt 360

tcaaaatatt tgctaaac 378

<210> 7741

<211> 359

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-007-Q1-E1-B1

<400> 7741

ggtcgacgca cgcgtccacc cacacgtccg cccacgcgtc cgcccacgcy tccggtgccc 60

tgcaggagtc gctcgccacc aagctcgccg ccgggatgac cgcaatgagc agggcaaccg 120

acaacgcaat cgagctcggc aggaacccct ccatcgccca caaccgacag cgccaggcca 180

agatcaccgg ggagatcctc gagatcgctc ccggtgccga cgccctcgct ggctgagcct 240

gagtcncctt ggtgggtgcyg tgctcctgct atatataatt ctttttcctc attttctcca 300

ctctgcctgt aattcctgat aatagcacaac acgcaacgga gttctgtgtt ccttgcgac 359

<210> 7742

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-B11

<400> 7742

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ccgcccagccc cgagctgagg gcgttctggg acgaggtgcy caacgtgggg cacggcgaca 180

agaaggacga gccgtgggtg cccgtgctgg acaccgcga cagcctggtg gagacgtga 240

ccaccatcat gtgggtcacc tccggccacc actcgccgt caacttcggg cagtaccact 300

tcgcccgtca ctcccccaac cggccgacca ccatccggaa gaacatgccg gtggaggagg 360

gcgggccggg cgaggagatg gagaagttcc tcaagcagcc ggagacgacg ctgctggaca 420

tg 422

<210> 7743

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-B2

<400> 7743

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acaacgacaa tcctatgcgg aaaccgcacc tacgcaagcg accctaagaa gcaactgggc 120
atccaaagaa cattataccc ctcccattgg gcttctgcc cttttttgta gtgcaacaaa 180
tggcgtcatt attccacaat gctcacttgc acatagtgc attattcgac agttctctcc 240
tccagttacg tcaatgggct tcgaacatgc agctgtgcaa gcctagaggc tacaacaagc 300
gcttgcgag agcgtcttag aacaaccaat tgcccaatta caacaacaat ccttgggaca 360
tctaaccata cataccatcg caacgcagca gcaacaagca ctgagccaac taaccgtggt 420
gaacc 425

<210> 7744
<211> 432
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-007-Q1-E1-B7
<400> 7744

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ccgcgcgtcac cgtgcagctc ccggggggcg agcgcgtgcc gttctcttc accgtcaagc 120
agctcgtcgc caccggcaag cccgagagct tcggcgggcc cttctctctg cccagctacc 180
gtggctctct cttctctgac cccaagggcc gggcgggctc caccggctac gacaacgccg 240
tcgcgtctcc cgccgggggc agaggtgacg aggaggagct ccagaaggag aacatcaaga 300
acgcgcctc ctccaccggc aacatcacgt tgagcgtcac caagagcaac ccggagaccg 360
gcgaggtcat cggcgtcttc gagagcgtgc agccgtccga caccgacctc ggggccaagg 420
cgcccaagga tg 432

<210> 7745
<211> 416
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-007-Q1-E1-C1
<400> 7745

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tggcgggcat cgagatctcc ttcacgctga cgtccaagtc gggcggcgac gacgtggacg 120
 acgagttcgc ggacctgtac atcgtcaagt ggacgtcgct gatgatcccg cccatcgtga 180
 tcatgatggg gaacctgac ggcacgcgg tcgggttcag ccgcaccatc tacagcgaga 240
 tcccgcagtg gagcaagctg ctggggcggc tcttcttcag cttctgggtg ctggcgcacc 300
 tgtaccggtt cgccaagggc ctgatggggc ggagggggccg cacgcccacc atcgtcttcg 360
 tctggggcgg cctcctctcc atcaccatct cgctgctgtg ggtggccatc aacccg 416

<210> 7746
 <211> 258
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-C10

<400> 7746
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 ctgcagaccc tgtcacgat tcttaaaactg cagacgatag aacttacatc catgcactag 120
 tggtagagat cctcatacct gacgatgtat gctctgatgt acttctacaa actcgcgtgt 180
 ttagcgctac gggccatcct gttgtcaacg tttcagcgat gttggacatt tttggtatgt 240
 taccacgcta tactgtca 258

<210> 7747
 <211> 76
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-C11

<400> 7747
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 gtaatttcat ttcaag 76

<210> 7748
 <211> 463
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-C12

<400> 7748

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tcggcaccaa gaactgcgat ttccagatgg agcggatatgt ctttaagcgt cgcaccgacg 120
gcatctacat catcaacctg ggcaagacat gggataagct ccagctcgcg gcgaggggta 180
ttgttgccat tgagaacca caagacatca tcgtccagtc ggcccgcccc tacggccagc 240
gtgctgtcct caagttcgcg cagtacactg gcgcccatgc categctggg aggcacaccc 300
ctgggtacctt caccaatcag ctccagacct ctttcagcga gcctcgcctg ctcatcctta 360
ctgacccaag gactgaccat cagccaatca aggagtctgc tctggggaac atcccgacca 420
ttgccttctg cgacactgac tctcccatgc ggtatgtcga tat 463

<210> 7749

<211> 413

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-007-Q1-E1-C2

<400> 7749

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ccatgatgaa gaataatagc cccgagattg ttcaaactcg aggcgcgatgt tttaaggctc 120
atctcctaca tttaattgga aaaaagaaag acttctaaga tatatttttc cgcggtcaga 180
ggggagagca actgatactc gaaagtggga ttcagcctgn gcatatgtgc aatgatatta 240
cagactttgg acaagtcatc agtcatgggt gattgccttt gtgttgcttc catgcctggg 300
catatgtgca atgatattac agactttgga caagtcatca gtcatgggtg attgcctttg 360
tgttgcttcc atttttcgac atctcatcct acatttaatt ggaaaaaaga aag 413

<210> 7750

<211> 370

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-C3

<400> 7750

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 tccctttctg cgccatcgct tatagtttca cggggatttt cggcacgctg atctgctcgg 120
 ttccggcagt caggcaaagc ctgatattca tagctgggta agagatgata tgaatttgac 180
 ggtttcatte tttagataaa agaagcagct tgcttctctc ctccgtgttc agaaggtcag 240
 gaagcaacgc cccacatgtc aggtcaggat tcaatatgtg taggggcttg aaaaaaaaaag 300
 gcgaataatt ctgtaatcag gatgtaaccg acatactaca gttttttttt tcttgtgaca 360
 aaatactact 370

<210> 7751
 <211> 454
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-C5

<400> 7751

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 tgtttaacaa gatagagcct cctattcttc ttaagattct taggtgcatt aatcatttgt 120
 cgggtgatcc taattgtctt gagacacttc aacgcacaga tgcaatcaaa catctgatac 180
 cgattctgga gcttcgtgat ggacctctgg tttatcaaat acatagtgag gtccttaatg 240
 ctttgttcaa cctttgcaaa attaataaaa gaagacagga acaagcagcc gaaaatggaa 300
 tcatccctca cttgatgaaa tttgtcatgt cagactcacc tttgcggcag tatgccctgc 360
 ctttgtgtg tgatatggct catgctttct gcaactctag agagcagttg agggtcattg 420
 aggactagat gtgtacttaa atctgttgga ggat 454

<210> 7752
 <211> 434
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-007-Q1-E1-C6

<400> 7752

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 atggcgaata agtccgctgc cgctgtatt ctgctcgccg ccgccgtgct cggctgtctt 120

gtctcggcgt cgctcgccga ccagggcacc gccacctact acaccgtcta cactccgtcg 180
gcgtgctacg ggaaccagga cgagggcacg ctgatcgcg cggcgagcga cgcgctctgg 240
aacggcgggcg ccgctgcgcg caccatgtac acggtcacct gcgtcgcggg caccaacgag 300
accccggaacc cctgcaaccc cggcgccctcc gtcaccgtca agatcgtcga cctctgcccc 360
tcgcccgggt gccaggccac gctcgacctc tencagcagg ccttcgccac catcggcaac 420
ctcggcgccg gcaa 434

<210> 7753
<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-C7

<400> 7753

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agacaccacc gtttcatcta ccgcctccgt totatatgcc gcttccgttc tatctgccgc 180
cgcagcagca gccgcagcca tggcaatacc ccaactcaacc accgcagcta agcccgtgcc 240
agcagttcgg atcctgcggc gtcggcagcg tcggcagccc gttcctgagc cagtgcgtcg 300
agttcctgag gcaccagtgc agcccgggcg cgacgcctta cggctcgcca cagtgccagg 360
cgctgcagca gcagtgtgc caccagatta ggcagggtga gccctgcac cggttacagg 420
cgacatacgg tgtg 434

<210> 7754
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-C8

<400> 7754

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tccgcccacg cgtccgcca cgcgtccgag aacctccgcg tccgcgtgta caggccgacg 120
acgccgcccg gggcgaagaa gaagctcccg gtgctcgtcc acttccacgg cggcggttc 180

tgcctgggggt cgtgcacgtg ggccaacgtc cacgagttct gcctccgcct ggccgaggag 240
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 gccttcgacg acggggccgg gttcatgcgc tggctccggg accagtcagc gatcggcggc 360
 gccggcgccct cggacgcctg gctcggggag gccgctgatt tcggccgcgt gctcgtcacc 420
 ggcgactcgg cgggcgccac ga 442

<210> 7755
 <211> 385
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-007-Q1-E1-C9
 <400> 7755

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 ctgcagaagc atgcgcttag tcgttatttg cagacgataa taagtagatc gatggagtag 120
 tgatcgagca acacacacgt gacgacgttt gctcttattt acttacacgc acgcacgtgt 180
 acggcgctag gggccgtata tatatcgagt tctgcatgca tatctcgatc gatgggatga 240
 ttagtcgttt cagtcgcagt agtaggagta gccgtgccc tgcccgctgc cgtgcggcac 300
 cctgtgctcc tgctgctgc tctcgtagtg ggctccttc tgctcgggt gctcgtggta 360
 cgcgtagccg ccggcgccca gcgcc 385

<210> 7756
 <211> 435
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-007-Q1-E1-D1
 <400> 7756

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 cgcgccagg ccgccaccg tctccatggt cgtccgcgcc tccgcctacg ccgatgagct 120
 cgtgaagacc gcgaaaacga tcgcgtcgcc gggggggggc atcctggcga tggacgagtc 180
 gaacgcgacg tgcgggaagc ggctggcgtc catcgggctg gagaacacgg aggccaaaccg 240

gcaggcgtag cgcacgctgc tggtcacggc gccgggacctg ggccagtaca tctccggcgc 300
catcctcttc gaggagacgc tgtaccagtc cgccgtcgac ggccgcaaga tcgtggacat 360
cctggcggag caaggcatcg tgccggggga taanggtgga caagggcctt gtncgctcg 420
ccggctccaa caacg 435

<210> 7757
<211> 419
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-007-Q1-E1-D2
<400> 7757

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tgcaaacatg acaccgcgac aagcacagct aaagaaatat agagagaaaa agaaagaccg 120
gaactttggg aagaagggtgc ggtaccagag cataaagagg ctagccgacc agcggccacg 180
ggttcatgga cagtctgtca agcaagctgt gcaaaatcag gacggagcta cagagagatg 240
accgacatcc cccctccctt gtggctgtgc tgctactgg cttcaactcc ctactgactc 300
cgactccacc tctgctggca tgcattggtt ccgctttgga ctcaaaacac ttgacagtta 360
gacatgcggt tgataattct tccgtctctc gtgggtgtgga ctgatatggt cgacaacac 419

<210> 7758
<211> 433
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-007-Q1-E1-D6
<400> 7758

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ctcgactgca accaggacaa caagccgctt gcgaaggagc tgggcataaa ggttgtgcca 120
acgttcaaga tcttcaaggg tgggaaggtc gtgaaggagg tgaccggcgc caagatcgac 180
gagctagcgc aagccatcga cacagtcaag tcagactgac aaagaaagca ggtgatgcaa 240
ctagctagtg tagacgatga atgaatgagt ccccgccgg ccttttgtgg gacagcaagg 300
ctgctagata cgtacgtacg tactcatcaa caattaatga tggatgatgg caatggcaaa 360

tatacagtca atgattcata tatgcatgca tggactgcta tgctagctag cagccctttg 420
 taaatatagt gtt 433

<210> 7759
 <211> 431
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-D7

<400> 7759

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 tatctgccat gcataactag actggatggc catggctcaa actaacttac tttttgccta 120
 cggctgaaac atttagacag gcagcttacc atataaatgt cacctcctag gtggctaccc 180
 tgactacctt ttcgcggggg ggggggggtg actttttttt tactgcaaga tctaataaac 240
 tactgtggcg tttaaatttg tatatttcca gatgacattc atcctgcgca tgatgaacaa 300
 taaatcaagg ttgtcggtaa gtgaaaatag agatcaagat tcaacgaaca caacacagat 360
 cctgatgttt agtggaagtt tgctgcctgt aatgtttctg tcaggcttat tgggatgtgg 420
 agctggaatt t 431

<210> 7760
 <211> 332
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-D8

<400> 7760

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 ggtccgagcg cagcgaaggc tgacgattga ccggaaggta cattacctaa aagcgatgtc 180
 acgggtagag atcgtttgat tattatcatc tgtatatccc catgcatggg gtttcgtttt 240
 gtgcgcgtaa ttctggcttg ccagcgatg gttcactgtg ggaacatatg tactaggatg 300
 acagtacgtg aaaattcaga tcacgattca ac 332

<210> 7761

<211> 435
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-007-Q1-E1-E3
 <400> 7761

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 caggaggcgg tggccgtgct gcgaccagtg cggcatttgc accaggtcgc agccgccgat 180
 atgcgagtgc agggacacgt cgacgaccgg ctgccaccg gcttgcaagg cgtgcgccct 240
 gtccatctcc gacggcctct tcgtgtgcaa ggacaagatc gtcaacttct gcaagcgccg 300
 ctgcaccctg cgtactgatg atgatgatgc gtgacttata atcacttaat taggcaaata 360
 accttgccaa taaataattt ccgttcggag ctccatttgc atctttctca agatgcagac 420
 gacagggttt aaata 435

<210> 7762
 <211> 354
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-007-Q1-E1-E4
 <400> 7762

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 aaccttcctt cccctattcg gtggggagaa ggacgtaaata caataatcat gttgttctgt 180
 tgtgttcaaa aactttgtga cctttttgtg ccgccatggc atccgggcat tgggacgagt 240
 acttaggaag aggagaatgt gtgaataata tttttgttga acgggtccga aaggtgtgtc 300
 aagagattgt cgatggggcc ggcattgagtt acggatgctt gcaccatgaa gccca 354

<210> 7763
 <211> 382
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-007-Q1-E1-E5

<400> 7763

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gctcacaagt accgtctcgg tctctggaag cctcaagcag aacccaggaa agttgaataa 180
aattggtttg ttcttgaaag ctagtctact gttggactga ggcttggttg ggacattttg 240
aatatttcct tttgtaattt aggagccaca aatctttgtt ctctgtctct ggccatactt 300
atgtgcatcc attgtgcaat tttttctaga aaatttcaa cttcgcggtg aataacaaac 360
cgcaacaggt gcagccccct gt 382

<210> 7764

<211> 471

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-007-Q1-E1-E6

<400> 7764

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gctcaactct tgggatgaac aatcaagctg ttagggcagc ccaggatgca gttaagcact 180
cggaggagct tgatataagg aggagcccaa tctcaattgc agccgctgtc atttatatga 240
taaccaact ctcagaggac aagaagccac ttaaagatat atccttggct actggtgtgg 300
cagaaggcac catcagaaat tcttacaagg atctgtatcc ttatgcctca aggtcatcc 360
cgaataccta cgccaaggaa gaagacctga agaattcttg cacaccttag gaagcttacc 420
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<210> 7765

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-E8

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gccaggccaa cagttttgag gtggtaatgg cggaccaggc taaccaaccc actgtccttc 120
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 acatctgccc ttctttctca ctttatgaaa ggagatttgc cacgaggaac tacatgaccc 240
 agagcctttg gggcccttca atgtctgtta gcggtggcat caatgttcca gtgatgccga 300
 ctccgctttt tgccaatgct ccagccgaga aagggtggcaa aaacttcatg attgatttca 360
 tgatgggagg tgtttcagct gctgtttcga agactgcagc tgctcccatt gaacgagtga 420
 agctgcttat tcagaatc 438

<210> 7766
 <211> 111
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-F1

<400> 7766

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<210> 7767
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-F11

<400> 7767

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 tcatcaacac cttctattcc aacaaggaga tcttctctcg ggagctcatt tccaactctt 180
 ccgatgcgtt ggacaaaatc aggttcgaga gcctcactga caagagcaag ctcgatgcgc 240
 agccggagct gttcatccac attgtaccag acaaggcttc gaacacgctc tccatcatcg 300
 acagcggcat cggcatgacc aagtccgacc ttgtcaacaa cctcggatc atcgccagg 360
 ccgggaccaa ggagttcatg gaagcccttg ctgctggcgc tgatgtgtct atgattgggc 420
 agttcggtgt 430

<210> 7768
 <211> 429
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-F12

<400> 7768

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agaagttaag agttgaggat gccctaaatg caaccaaggc tgctgttgag gaaggtattg 180
ttgttggtgg aggatgcacc cttttgcggc ttgcagctaa agtcgatgcc atcaaggata 240
cactggagaa cgatgagcag aaggttggag ctgaaatagt aaggagggcc ctgagctacc 300
cacttaaatt gattgctaaa aatgccggtg tcaatggcag cgtcgtcact gagaaggctc 360
tttctaacga taacttcaag tatggttaca atgctgctac tggacagtac gaggacttga 420
tggtctgtg 429
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<210> 7769
 <211> 371
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-F3

<400> 7769

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ggtgcgggtg gcatcgtcac ccgctgaccg cggctctcct ccggcggctc ccgtgcggcg 180
cggcagctgg tcgtggcacg cgccggctcg cgccggcggc agagtcgcag gccgtgcagg 240
agcagccggc gcgggccgaa gaggccggcg gggcgggtgc cgctgaggcg tcctccaagc 300
tggttctggt cgttggcgga accggcggcg tcgggcagtt ggtttagca tcattgctga 360
gcaggaacat c 371
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<210> 7770
 <211> 448

<212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-007-Q1-E1-F4
 <400> 7770

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ttcttggaact ttcacgggga ctgtgaacca tctgtttct tacctatatg ttggttagtt    180
gtttatttcc aagcttgat gaatctgaga ccaagagttt gtagagaata attgccgcgg    240
aaggctgata gcaaaccaag tatctgtact gtattcagca atcagcagtt ctgatgttcg    300
atcttggaatt gagtcagaa aatgctgttg aggtttgaac tanggaggcc agcattcctc    360
tggttttgta ctgttgtag agtaagaaca taactaggaa ctagtattgc agtggcagtc    420
actgagtcga tatatctact tctgcacc                                     448
  
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<210> 7771
 <211> 416
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-007-Q1-E1-F5
 <400> 7771

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cttcgcggcc ctggtggccg tggccgtctg ccaaggcgag gtcgagcggc agaggctcag    180
ggacctgcag tgctggcagg aggtccagga gagcccgctc gacgcgtgcc gccaggctct    240
cgaccggcag ctaaccggcg gcggcgctcg cggcccgctc cgggtggggca ccgggctccg    300
gatgcggtgc tgccagcagc tccaggacgt gagccgcgag tgccgctgcg ccgccatccg    360
gagcatggtc aggggctacg aggaggccat gccgcctctg gagaaaggct ggtggc      416
  
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<210> 7772
 <211> 460
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-F6

<400> 7772

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ttgtcagagt cgcaacagcc agggaggagg tgaaacacat gaagaatttc gactatgtgg 180
ttgtaaagc tcaagggaac cttgaggagg ctgttaaaca agtggaatct atcattgatg 240
ctgagaagtc taaaattcac aagcggcatg tcaatatcta agccaaggat catgtgattt 300
atgcctattg tcttcatctc tataaaggaa aattatctgt ccaagtctac tgaagcgtga 360
tgaaatgact caggtttcag tagccagaaa gttcaatgga ttgctgagtt acaagaatat 420
ggcatgttct gtttaagaaa tttccctcac cacaaccggg 460

<210> 7773

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-F7

<400> 7773

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ggcgccccgg cgggccggat cgtgatggag ctgtacgcca acgaggtgcc caagaccgcg 180
gagaagttcc gcgcgctgtg cacgggagag aatggcgtgg gcaagtccgg gaagccgctc 240
cactacaagg gctccacctt ccaccgcgtc atccccgagt tcatgtgcca agggcgagac 300
ttcaccgcg gcaacggcac cggcgagag tccatctaca gcgagaagtt ccccgacgag 360
acatgcgtgc gcaagcacac cgtccccggt gtgctctcca tggccaacgc cgggc 415

<210> 7774

<211> 457

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-F8

<400> 7774

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 tgacggtggt gcgggggctg gacgtggcgc ggtacatggg gcggtggtac gagatcgctt 240
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 tggaggacgg cggcacggtg cactgtctca acgagacgtg gagcaagggc aagcgcgact 360
 acatcgaggg caccggcctac aaggccgacc ccggcagcga cgatgccaaag ctcaaagtca 420
 agtttctact cccgcccttc ctccccatcg tccccgt 457

<210> 7775
 <211> 365
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-007-Q1-E1-F9
 <400> 7775

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 ttgcctgctg ctggtggatg tgggtgatcaa cagtattatt acagagccat gctatgtgaa 240
 cattactagt agcagtgtc ataaaagcta caatcccatg tccttttttt cccagtcatt 300
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 cgatt 365

<210> 7776
 <211> 437
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-007-Q1-E1-G11
 <400> 7776

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gcttgggtata tcgtaccctg aattgacaga gatgcaagcc cgggccattt ttgaagctgc 180
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 aacaccacag gaactggggc atcaagtac tcttatccgc caagttgctg agaaagtgtt 300
 cgccaatgtg ggcaagacta tcgggtacaa agttggaaca atgattgaga tccccagggc 360
 agctctgggtg gctgatgaga tagcggagca ggctgaattc ttctccttcg gaacgaacga 420
 cctgacgcag atgacct 437

<210> 7777
 <211> 404
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-007-Q1-E1-G2

<400> 7777

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 ccaaaatgta cactagctta agcattangt gaagtttcat tgcaaaaggt tgatctgttg 360
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<210> 7778
 <211> 440
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-007-Q1-E1-G7

<400> 7778

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atggagaaag catcagggca ttctgctttg cgtcaciaag tttcaaacc agcaaaacc 240
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aagtttcaga agcacagcta ctgcttgctc nctcaggcga ccttgacctc gatgggtcttg 360
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cacacggtgt cgcacgggc 440

<210> 7779
<211> 385
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-007-Q1-E1-G9
<400> 7779

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cacatttttag gcagacgaac caagaacaga ccctgcttga ttggcgagcc tgacgttgga 240
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gtacaagggg aaaaggtcat aacccttgac atgggacttc ttgttgctgg cacaagtag 360
cctggagaat tcgaagaacg cttaa 385

<210> 7780
<211> 366
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-007-Q1-E1-H1
<400> 7780

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ctccagtcgc agcgacatgt tcaactgacat ggcatgactc atgcgcccac tgattcgctg 180
aaggttactc gcgacatgct ttgccgcaag tttgggccta gcagatgggtg atgcaacctc 240
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tctacctgca catctgcctt ctccagagcc gtgctctgat catttagatg ctcccttggc 360
agattc 366

<210> 7781
<211> 444
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-H10

<400> 7781

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ataccaactt catcaatttc tcgatacaga ataagctgga tttggagaag ggaatgatgg 180
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ctattaagtg ctaactctat agcg 444

<210> 7782
<211> 431
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-H11

<400> 7782

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cctcgctccc cagctccagc aggcagatca gatccatcca accacgaaca ggaaggaagg 180
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agtggtgga cctcatcacc accaccgcct ggttcgcga cactgggtcc cgcgagcacg 360
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atgaggaact c

431

<210> 7783
<211> 308
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-H4

<400> 7783

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gagcgcgtgg ggcggttggc cgcgcagagc cccgtggtga tcttcgcctg acgcggtgac 240
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gagctgga 308

<210> 7784
<211> 468
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-H5

<400> 7784

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ccgccggtcc atgtgccgcc gccggttcat ctgccgccgc caccatgcca ctacctact 360
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ccaagcccgt gccagctgca gggaacctgc ggcgttgga gcaccccg 468

<210> 7785
<211> 404
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-H6

<400> 7785

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cttgcgcgga tcgagacgac cgggaagaag aagcaggaca acggcgtgtg gtacgacgac 180
agctcggcgc cggcgcgcgc gcagaccatc gacgagctgc actcgtctga gcggaagcgg 240
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tcgcccacgc ccgtcgcgat ctccgaggag gagcgccaca cgcagcagat gcagtccatc 360
agtgcgtcgt tggcgtctct gacgcgtgac agcgggcccga aagt 404

<210> 7786

<211> 347

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-H8

<400> 7786

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ctacctcggg cggcagcatg cagccatcat gtctgacgac aagcaccacc acttcttcaa 120
ccaccacatg aaggacgacg agcagcccgc cggcgagtac gggactccg ataccgaggt 180
ggtcacgcgc accggctagg gcgagtacga gacgtacaag aaggacgaga aggagcacac 240
gcacaatcag cacctcagca aggcgggcgc catcgccgcc ggcgccttcg cactctacga 300
taagcacgag gctatcaagg accccgagca cgcgcacagg cacaaga 347

<210> 7787

<211> 451

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-007-Q1-E1-H9

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gtagctgaca cacctcttgt gtctgctgat actgtactag atatatctgg tggcaagcgt 240
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tcatataaaa caatttgctt tagcaacagg agctttggta ttgggtgctgc taatgttgct 360
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<210> 7788

<211> 441

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-008-Q1-E1-A1

<400> 7788

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caaccatttt cccacaatgc tcacaagctc ctatagcttc cctttctccc ccatacctct 180
caccagcggg gtcttcaatg tgtgaaaacc caattgttca accctacagg atccaacagg 240
caatcgcaac aggcatttta ccattatcac ccttggttct ccaacaaccg tcagccctat 300
tacagcagtt acctttgggc catttggtgg cacaaaacat cagggcacia caactacaac 360
aacttggtgt agcaaaccct gctgcatact ctacgaaca tcagtttctt ccattcaacc 420
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<210> 7789

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-A10

<400> 7789

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ccggttctgc gtcagcacat tctgaatct gaagccaagg ataagttcat atctaaatgg 120

aataatgtgg ctcataacag aaatattact tctggcttga actcgtatgg tttttatgct 180
 tatgactcgg tttgggctgt tgctcgtgct gtcgataaat ttctcagtaa tgggcaacag 240
 atcaacttct caacagaccc cagggttagaa gattcaaatg gcagcacgtt gcacctatca 300
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 acgggtgtaa cagggtccagt ccagtttgat tcagagcaca att 403

<210> 7790
 <211> 443
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-A12

<400> 7790

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 tataaacgta cacagcgctt accttcatgt gcttggggac tccatccaga gcatcggggg 180
 gatgatcggc ggggctatca tctggtacaa gcccgagtgg aaaatcatcg atctgatctg 240
 caccctcatc ttctcgggtg tcgtgctgtt caccacgac aggatgctgc gcaacatcct 300
 cgaggtcctg atggaaagca cgccccgtga gatcgacgcc accaggctgg agagggggct 360
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 gaaggtgcta ctggcttgcc atg 443

<210> 7791
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-A2

<400> 7791

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 gtagaggccc gggaacagcg aagcacgaga aagaaggga gcacagaagc cagctcatga 180
 aaaatagagg ttcagaaaca gcaatccatg aggaggtagc agagcaacac agctcagtag 240

aaacgagccg tgaggaagca ggattattcc aagaacagac ctcagatata agtcacaaag 300
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aagaagaatg tactagttaa gtaggagcgg gtaaacaacag ctcagtagga acga 414

<210> 7792
<211> 248
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-A6

<400> 7792

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cagccgctcc atcgccgaca gcgacagccc cgcgcgtcc gccgcccaca gcaggcccgc 180
gcgctccgcc ttggtcacca gccgcagcat caccaggggc gtcagcaacg taaagggagc 240
tatggaga 248

<210> 7793
<211> 327
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-A7

<400> 7793

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gtagatgggg ggctgatctc agggttcctg ttttaacaaa gcttttctgt gatgtcactg 180
accttcaatt cattaacctc cttttaatac attgcccttt gtttaaaacc ggcgttatcg 240
aaaaaacccc gacttttata actttccctt ttttgacaaa attctccctt tcaaaagggtg 300
cgctctgttt cactgcgcca aaagttt 327

<210> 7794
<211> 414
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-A9

<400> 7794

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ctttctacat gtgttgctaa cgcgacaatt ttccctcaat gtcacaagc tcctatagct 180
tcccttcttc ccccatacct tccatcaatt atagcttcaa tatgtgaaaa ccagctctt 240
caaccatata ggcttcaaca agcaatcgca gcaagcaaca tacctttatc gcccttggtg 300
tttcaacaat cgccagccct atctttggtg cagtcattgg taaaaccat cagggcacia 360
cagctgcagc aactcgtgct acctctgatt aaccaagtag ctctgggaaa cctt 414

<210> 7795

<211> 456

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-B10

<400> 7795

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cgtgctctcc gcaagttatg gagcatgaga agttcactga atctagtaag caccacactt 120
gatgttttta ctggcaagtg gattcagtat tcatccggaa ttggtgctgg tgttgattca 180
ttttatgagt atctgattaa agcatatatt cttttcggaa gtgatgagta ctgggatatg 240
tttcattcag cttatcttgc ggtgcagaag tacttccgac atgggtccatg gtatcatgag 300
gctgatatga ggactggaga agcaacgcac tggcagctaa ctagccttca ggctttcttg 360
ccaggtcttc agacacttct tggagacgtt actgctgcaa atctatcaca ccgtgagttt 420
tacaatatat ggcaaagatt tgggtgtgcta cctgaa 456

<210> 7796

<211> 449

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-008-Q1-E1-B12

<400> 7796

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cctcccagtc gccggcgcg ctagcgggcg tgctggagca agtggaccag ttgctaagcc 180

aggggaacga catggccgcg ctctccctcg tgcgcagtac gcangggggg gacggcgggc 240

tccgggcctt tggcgccgcc aggcaggtag ctcaacgact ttataaattg gatgagctta 300

aactgaatgg gattgatact tctgctttcc tatcacccgt agatctgaca ctangatcaa 360

ttgagagaaa tctccanac gctgcagttc tgggagggct ttctgtatca gctgcattgg 420

aactttctca actccaaatc ctgtttctc 449

<210> 7797

<211> 442

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-008-Q1-E1-B5

<400> 7797

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agcttgctac agagaggggc cgcaaagcta ggctaactt gaaggtgggc atttgtggag 120

aacacgggtg agagccttcc tctgtggcct tcttcgcgaa ggctgggctg gattacgttt 180

cttgctcccc ttccagggtt ccgattgcta ggctagctgc agctcagggtg cttgtctgag 240

gctgcctcct cattggcaac cggattgcct gctgctgggtg gatgtgggtga tcaacagtat 300

tattacagag ccatgctatg tgaacattac tagtagcagt gctcataaaa gctacaatcc 360

catgtccttt tttttcccca gtcattgtaa acttccaaac tgctccatgg ttcaaaactc 420

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<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-B7

<400> 7798

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tccttcgatt ggggagttaa gaagtgggtc tccaagacta gttgaactga acgattttgt 180
gcgtcaacga cacaacaaag gatttcttga tgttcttagt tttagtgagg tagtaacatt 240
cgtactgcc a gttccactg ccacaatgct aagttatagt atatgcta at tggttcctga 300
cagaccagg tcacaccgat tgttgaagga tatggcgggtt gggcacttcg tatggagata 360
gtgccaatg aatctgcata ccaggcttt ggggagcttg tcgtaagtat ttttcacaac 420
tcattgtacc attgggtagt gcacatggaa t 451

<210> 7799
<211> 437
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-008-Q1-E1-B8
<400> 7799

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agtatgctgt atttgggagg gtcactaaag gtgacgatac attgactaaa ctagagaggc 180
ttccaaccgg gagagaaggc atttttgtaa tgccgatcga gcgtatcaac atcctatcaa 240
cttactatta tgatattgat ctagagagct gtgaagcaga aaaatctatt ctccggagga 300
gactttctga atcagcatca gaagttgagc gatggagaag aaaatgcttt gcttaatgg 360
ggaataagga ctgcatattc cgtttcatga tgctggatgg tttcctgagg ttgaatatgg 420
acgacggtgt ggacatg 437

<210> 7800
<211> 467
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-008-Q1-E1-C1
<400> 7800

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 cagtgactga tcgatggcgg cccaggetct cctctccggc cggcagctgc tggggccgcc 180
 cgtgcagtcg gccgtctcta ggctcgtcgg gaggaaggcg cccttcgtcg tcagggccag 240
 ctccagccct ccagccaagc aaggtgccga caggcagctg tggttcgcgt ccaagcagtc 300
 cctctcctac ctcgatggca cgctgcccg cgactatggc ttcgaccgcg tgggcctctc 360
 ggaccgggag ggcaccgggg gcttcacga gcccaagttg ctggcctacc gcgangtgat 420
 caacggccgc tacgccatgc taggcgccgt gggcgccatc gccccgg 467

<210> 7801
 <211> 437
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-008-Q1-E1-C10

 <400> 7801

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 gagcaataat agatgccctt gtgagcggta ttgaaaaatt tgggtggcaga cttgctcttc 180
 gttctcatgt tgaaaagatc ttaatagaga atggctcagc agttgggtgc aagctacaaa 240
 gtggacaagt tatccgtgca aagaaagcgg ttgttagcaa tgcatttatg tgggacactt 300
 tggatctgtt acaccgatg ctgtcncaa atcatatgaa gatagagtga aagcaactcc 360
 acaatgtgaa tcgtttatgc atctccacct tggttttgat gcanagaatg ctanagaaga 420
 ccttgggatc catcaca 437

<210> 7802
 <211> 448
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-008-Q1-E1-C11

 <400> 7802

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ggcggcccag gctctcctct ccggccggca gctgctgggc cgccccgtgc agtcggccgt 180
ctctagggtcg tcggcgagga aggcgccctt cgtcgtcagg gccagctcca gccctccagc 240
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tggcacgctg cccggggact atggcttcga cccgctgggc ctctccgacc cggaaggcac 360
cgggggcttc atcgagccca agttgctggc ctatggccaa gtgattaacg ggcgctacgc 420
catgctgggc ccggttgggc gccatcgc 448

<210> 7803

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-C2

<400> 7803

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ctgcggtcga agctgcaagt gcggcaagaa gtaccctgac ctggaggaga cgagcaccgc 180
cgcgcaggcc accgtcgctc tcggcgtggc cccggagaag aaggccgcgc ccgagttcgt 240
cgaggccgcg gcggagtcg gcgaggccgc ccacggctgc agctgcggtg gcaactgcaa 300
gtgcgacccc tgcaactgct gatcacatcg atcgacgacc atggatatga ttaatatcta 360
tccaacttgt ggtggtggtt gaacaataat aagcgaggcc gagctggctg ccatacatag 420
gtattgtgtg gtgtg 435

<210> 7804

<211> 451

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-C3

<400> 7804

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ctcgaccac catcacgctc tgggtccgag agggagagtc ctctggctcg ctccccctgc 120

cccaggtctt caccgctccc atccgattgg atgttggtca gcaggtccac aagtcgatgg 180
ccaagaacaa gagacagcca tacgccgtcg ccgagaacgc tggtcaccaa acctctgccg 240
agtcttgggg tactggacga gctgttgccc gtatcccccg tgtgtcgggt ggtggtacac 300
agcgatctgg acaggtgcc ttcggtaaca tgtgccgagg tggtcgaatg ttcgccccaa 360
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gcctccgccca ttgccgcttc gggccctcca t 451

<210> 7805
<211> 232
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-008-Q1-E1-C4
<400> 7805

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catcagattg gatgttggtc agcaggtcca ctagtccgag gctaaccatg agagacagcc 180
atacgcttc ggcgaaaacc ctggtcacca aacctctgca ggatcatggg gt 232

<210> 7806
<211> 316
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-008-Q1-E1-C5
<400> 7806

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gatgtttccc tgattctaac gtatatgcac cagtgtgttg aggattggaa gtcattggtg 180
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gcaatcgtca tggatga 316

<210> 7807
 <211> 438
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-C6

<400> 7807

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aggagaagaa caccaggaag atcaggaggg cctccgcgag ccagtcccg cggctcgtgg    180
cccgatcggg cgactcggac gaggagatac ttaacagcga gtacaagacg aagatgtacg    240
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tgctttgttt cgccagaggg tgctccatgg cattcggctc gggatgcaga ggctgcggca    360
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<210> 7808
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-C8

<400> 7808

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cgcgggcgcc gtgtatggaa gcctcctcgt cccctcgcct cccgtccccg cgccggcacg    180
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tgttttccgc tcaaacaac atctgtacgc tcaagtcac gacgacaaa agcaatgtac    360
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<210> 7809
 <211> 414

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-008-Q1-E1-C9

 <400> 7809

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 gccatcaggt ttggttcggt agaaaactgc aagaagttca aggagtgggt tgaggagata 180
 gctgagtcgc ttacaaagaa cgagggcaag gaaaggtaag atgggtggttc cacggctgga 240
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 actgaatccg gcaaagtgac tgaaaccaa gccgacacag cccaactga gtagttgggt 360
 tggttgact tgcacgcaaa ttcccctggt gctgaactag tttgtctgtc cgcg 414

<210> 7810
 <211> 267
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-008-Q1-E1-D12

 <400> 7810

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 taacccgcaa aaaggattaa agcttagtta tacttgacgg cgaagtcaaa aatcataaag 180
 ggggggtcccc caaaagggtt aaactttact ttccctttaa agccgacgtt aatgctcttc 240
 actcgggtcc cctaatttca tttcctg 267

<210> 7811
 <211> 435
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-008-Q1-E1-D3

 <400> 7811

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tggtatctgc ccactgttgc ctcatcctc ttctgaccc gagtttgagg ggcctgctga 180
 tgctagattc gatgttaaga ctgcagtga ggtgtactcg ccggaggaat atgaacaact 240
 taaatctgag aaggcaaatt tggagggaga actagcaaag tgcaacaaaa taatagaaga 300
 aacaatggct aggttaagt atgtggagaa aaaactggaa gacctgacat ctaagttggc 360
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 caagtcactt gaatc 435

<210> 7812
 <211> 425
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-008-Q1-E1-D4
 <400> 7812

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 atcacaacta atgttttagt atatgcaaca ttactcttat aaaaatagtc tgtgtctata 240
 caattataat tatttatatt tgacactaat tgtgtaagat aaatcactga agggacaaca 300
 aggccagagc cacgtattca agctgctaag ttgcatgag agggtggtat tcacgttttg 360
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<210> 7813
 <211> 454
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-008-Q1-E1-D5
 <400> 7813

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 aagctgtgcc accttcgag cattctcatg catcatggag gggctcaata agcagcaggc 180

tgcaatggct cgcacgcttg gagggactgc cgcgatggcc gtgcatgaga aatgtggtgt 240
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<210> 7814
<211> 426
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-008-Q1-E1-D6
<400> 7814

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gaacatgaac ggcaaggagc tcgacggccg taacatcacc gttaaccagg ccaggtcccg 180
tggcgggtggc ggtggcggcg gtggctacgg cggcgggtcgc ggcggcggcg gctatggtgg 240
cgggcgccgt gacggcggtt atggcgggcg tggcggctac ggcggtcggc gcgaggggtgg 300
tggcggcggc tacggaggcc gtggcggcta cggcggtcgg cgcgaggggtg gtgggtggcgg 360
ctacggcggc ggcgggcggcg gctggaggga ctgatgtgtg ggcccatcct ggcttcggcc 420
gagtta 426

<210> 7815
<211> 468
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-008-Q1-E1-D7
<400> 7815

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ggcgttggca tgtgcatgga gggaatagag cacaatccag ttgtttatga acttatgtct 120
gaaatggcat ttcataataa gaaggttgag gttgagtgag atcgggatta attgaagttt 180
tctgccttga gttaaatgtt gacctgtgca tcagagaagg attgtccaaa acaccaaaca 240

tttctaattt gtgtagtttc ttggtagaca tgctttctgc gaccttggtt acatgaggat 300
 tggctaaaaa cataactcctg taggagatat ggtcaagcaa atgctgacat agagaaagct 360
 tggagatatt tgtatcatac aatatacaat tgcactgatg ggattgcgga ccataataaa 420
 gactatatag ttgaatttcc agacataagt ccagctcag ttacttat 468

<210> 7816
 <211> 401
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-D8

<400> 7816

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 ttccggcctcc gcaccatggt atgcttcccc gtcggcaccg gggtagctga gctcggctcc 180
 accgacgtcg tgttcaagac cgccgagagc atggctaaga tccgctcgtc ctttgggggc 240
 ggagcagggg gtggctcgtg gccgcccgtg cagcctcagg cgccgctcgc gcagcagccc 300
 gccgcccggag ccgaccacgc ggagacggac ccgtccatgc tatggctcgc cgacgcgccg 360
 gtcattgaca tcaaggattc cttgtcgcac ccgtcggccg a 401

<210> 7817
 <211> 458
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-D9

<400> 7817

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 gcatcgtggc cagcggcctc gccgcccgtc gcctcgtgca ggtgtcgtac gccatcggcg 180
 tgccggagacc cctgtccgtg ttcgtcaact cgtacggcac cggcacgac cccgacaagg 240
 agatcctcaa gatcgttaag gaaaacttcg acttcagggc cgggattatt agcatcaaac 300
 tcgacctgaa aaaaggccgc aacaagttca acaagaacgc cgctaaggc cacttcggcc 360

gttacgaagc cgacttcacc tgggaggtgg tgaagcccct caagttcgac aaggcatcgg 420
ctttaagttg ggagtgtcac tgtggacatg aggactac 458

<210> 7818
<211> 443
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-008-Q1-E1-E1

<400> 7818

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gaggaggtag aaggcgaaag aagggggaacc aaatcttggg cggggaacaca tagatttctt 120
tggtggagga aggaggaggg caacaagagg aggttacagg tagcccaata gatctactgc 180
tgttgagggg gttgatgcaa agctgagttg ctgcgcgttg gctttcttta gagatggctt 240
cagctggtgt tgccccctct gggtacaaga acagcagcag caccagcatt ggtgccgaaa 300
agttgcaaga tcacatgaac gagctaaaga ttagagatga taaggaagtt gaagcaacca 360
taattaatgg gaaagggacc gaaactgggc acataatttg tcacactact ggtggcaaga 420
atggtcaacc anaacagaca gtg 443

<210> 7819
<211> 206
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-E10

<400> 7819

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ttcatatgaa tacttttggg atcttatttt tatttggaa ttttttaata acattccaat 120
ttcgagagga ggttctaaag gttccaaact tacgttagcg tacatgcgaa tttatagttc 180
ttcaatagtg tcacccaaat tcaatt 206

<210> 7820
<211> 446
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-E11

<400> 7820

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tgacagtccc tatgctgggtg gtgttttctt agtgaacatt catttccgcg cagattaccc 180

cttcaaacct ccaaagggtt ctttcaagac aaagggtctt catcctaata tcaacagcaa 240

tggaagtata tgccttgaca ttctcaaaga gcagtggagc cctgccttga caatttccaa 300

aggcctgctc tccatctgct cctgctgac cgacccaac ccggacgaac ctcttgctcc 360

ggagattgcc cacatgtaca agacgggacg gccgaagtac ggtcgacgg cccgcagctg 420

gacgcagaag tacgcgatgg gctgac 446

<210> 7821

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-E2

<400> 7821

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atgcgcccgc ttatccgaac cgctcgctgc tggctcctcc gcgcgcgtgt tcgcgccatg 120

gccacgcttc ctatggcgtc ccccgccgcc gccatccct cctccgccac ccgccccgtc 180

gcctcccctt cttcgcttc tcaccgcccc ctcaaccgt tcttctcgt cgcgccggcg 240

ccggtcgggg cgaaagggt ccgagcggcg gcctccgccg ttgaagttgg cggcgtaaag 300

atcgcgcgcg aggatgttgt gaaagaagat gacccatcaa acaacgtgcc agacactatc 360

tttgcaaga ttggcctgca gctgcac 387

<210> 7822

<211> 325

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-008-Q1-E1-E3

<400> 7822

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acccattggt cgctaccttc ctgcagcagc aacaacaatt gctgccatac aaccagttct 120

ctttgatgaa ccoctgccttg cagcaacca tcggtggagg tgccatcttt tagattacat 180

atgagatgta ctgcacaatg gtgccctcat accgacatgt gtttcctaga aataatcaat 240

atattgattt agatttatct cgatatattt ctgaactatg ttcacatcat atataattga 300

naacatcana tcataatttt aaaaa 325

<210> 7823

<211> 461

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-008-Q1-E1-E7

<400> 7823

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tcttgcgacg acaatggaga aattctcttc tggacagttg gtcagactac atctactcat 120

gttttgcggg tgaagcaggg tggaactgga agagtcaggt ttgaacctcg aagtgggcag 180

ctcctcgctg tggcagctgg aagcatggtg aacatttttg atgttgaaaa gcaatccagc 240

ttaccctgcc ctccaaaggg tcacaatagt gaggtaaact ttgtgtcctg ngatgaaaat 300

ggtgaatatc tggcatctgt aagtcaggac actgtgaaag tgtggtcggt atcgtctggt 360

gtgtgcattc atgagttacg atccaatgga aaccaatatc agtcatgcac attccatcct 420

agatacccga aagtgttgat tgttggtggt taccagactc t 461

<210> 7824

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-E8

<400> 7824

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ttcctctctc ctctgcgtcg cttccacctc tcaatctcac cccacgcctg ccccgagctc 120
 caaccctaaa ggaacacacc cctgcttgcg gcggcgggga gcggtcttgg gcgtccgccg 180
 ttgctgtggc ccagccgtga cagatccggg ccccgcgccg ttaggtcggg gtttcttcgg 240
 cgacggtgca gccgctggat gttagtctgg cggatcgggg cccgttggtc gcgtgattcg 300
 aggcggtggt gagttgtaac atttgtatca catgaatgaa ctcagagcat ctcagtgtta 360
 aaactgtgag catatcaatt cccctccttt aagcaatatg ggagctaatt gctgcattgc 420
 tgc 423

<210> 7825
 <211> 450
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-E9

<400> 7825

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 ttgaattcga gaggcggaga gttacaaagg aagacataag ggagcttata tatataggga 120
 aattcttgag tatcatccaa agatgctgag ggagtttctt gagggaactg agtcaagtgg 180
 tttcatgtac ccaagtgcag tagatcattt taaaaagcag tttgcatacc ttgaagaaca 240
 ttatgccaaag ggatctacag gaactccacc tgagaggcaa cataattcat tgccgccggc 300
 gtccgttgtc caatccgaca accgattaca aaccaaagcc aacatcaccg aagatctttc 360
 caagtgtatg ctcagagaaa atacacagaa gacacatcca tattctgctt ctgttgcaag 420
 taaattttca ccacatgttc ctcaaagtga 450

<210> 7826
 <211> 435
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-F10

<400> 7826

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 ctattggtgg acatctctaa attagcttaa ggcgatacat gttatgtcca ctagagaaac 120

aacatcctga gacactcacc tttatttggga aatgtctcgc gattatcgct gatgtggaca 180
 tgtgttacat gcttctctac tcttaaaagt cttttgctcc gaatctcgag acgagattat 240
 ttttaaggggg gagggctgta acaccccagg tgtttatatt ctgctcgaca acgagtatgg 300
 aattaagcac gttatatcag tgaatgaaac agatactaaa atttaatcat tttcgctatc 360
 gcgattttta tatcgatatct gttccatctg tcgtgagtgt gacatcattt ttattcgctcc 420
 gggctcttcc tgaat 435

<210> 7827
 <211> 406
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-F12

<400> 7827

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 gagaaacggg agaaggaggg gctggtatat acaagggttc tgggggaggg cgatgacccg 120
 tcttcgccaa tcggccgtgg atggcagtcg acatttctca ctaaagataa agccgttgc 180
 gaggaagggg ccgccaagct cgggatgaag ctggaatgga ccggcgacgg cgtgaggacg 240
 gtcatggggc ccatcccggc ggtgaagtgg gacgagagcc gggggcgga ggtctggttc 300
 aacagcatgg tggccgccta cacgggggtg aaggacgcc ggaacgaccc ggtgaaggcg 360
 gtgaccttcg gcgacggctc gcccctgccc gccgacgtcg tcgccg 406

<210> 7828
 <211> 324
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-F2

<400> 7828

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 cactgggggt gccagtctat caaatacaga agtttggggg gcccccaag cggggtactg 120
 cggcatccca tatggatatg gtggcatgcc ccacatttga ttttggacat atgggtggtg 180
 cgggtatgca taatgatacg gcatataatg gatatgggtg tggaggtgtc catgatgttg 240

gtggtggtgg tgtgaccagt gatctttgat gtcataatgt gatatactct acttccagct 300
gcacctgtga ttttttttca ggac 324

<210> 7829
<211> 448
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-F3

<400> 7829

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gagagaagtt ctggataaat tgacaatgtc aacttgaatt gactaattca gttccgccta 120
ttccacatta atgggagtag atttatgttt ctgctttacg aatatgatat tttttggaca 180
tttctaataa tagcaagcct ttttctatt ttgggtat tttt ggatttcagg acttttagcc 240
ccggttagtg aaggaccaga gaagctttct agttatgaat cgggtataga acccatgggg 300
ggggcttggg tacaattccg aatacgtat tacatgtttg cgctagtttt tgttgttttt 360
gatgtggaaa cagtctttct ctacccttgg gcaatgagtt tcgacgtatt ggggtgtatcc 420
gtttttatcg aagctttcat ttttgtgc 448

<210> 7830
<211> 450
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-F6

<400> 7830

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ggggaggttc ggcggggaac aagttccgca tgtcgctggg tctgccagtg gccgcgacgg 120
tgaactgcgc ggacaacacc ggcgccaaga acctctacat catctccgtc aagggcatca 180
agggccgcct caatgcctc ccgtccgcct gcgttggcga catgggtcatg gccaccgtca 240
agaaggggaa gcccgcctc aggaagaagg tgatgcccgc cgtcatcgtc cgccagcgca 300
agccgtggcg ccgcaaggac ggggtctaca tgtacttcga agataatgct ggagtgattg 360
tgaatcccaa ggggtgagatg aaaggttccg ctatcactgg acctatcggc aaggagtgtg 420

ctgatctttg gcctaggatt gctagcgag

450

<210> 7831

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-F8

<400> 7831

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cgacgcgccc gggtagctgg acgtcgcgct gggaggcttc atcggtggc tgcgcgcctg 120

ggacaaggtg gggggcgta agctgctgga cgccggccgg gtcccgcgcc tggccacgtg 180

ggcggagcgc ttcgccgcgc tcgacgtagc caaggaggtc atcccgacc ccgaccacat 240

cgccgagttt gccaaaggtgc tgcaggcacg ctccgcggca gctgccacca gcaactgagc 300

tcgcaagtga atgctgctgc tctgccttcc tgataaaatc atatcatggt acccggtttg 360

ttcgtttaat ctggcgcgga aaaaacatgg tttgtgtcgc taccaaacta agagtatgca 420

tgcattgctt 429

<210> 7832

<211> 456

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-008-Q1-E1-F9

<400> 7832

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cacgcgtccg gtgtgctgct gaccctcgtc atggccgcta cctcacggca tctgctatgt 120

tccgtgggaa gatgagcacc aaggaagtgg atgaacagat gctgaacgtg cagaacaaga 180

actcttcta cttcgtggag tggatcccca acaacgtgaa gtcgagtgtg tgtgacattc 240

caccaattgg cctgaagatg tcctccacat tcgttggcaa ctcaacctcc atccaagaga 300

tggtcccccg ccgtcagcca acagttcacg ggcattgtca ggaagaaggc tttcttgac 360

tggtacacaa gccaaaggtat ggatgaaatg gagttcaccg aggcanaanag taacatgaac 420

gacctggtgg ccgagtatca gcagtaccag gatgcc 456

<210> 7833
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-G1

<400> 7833

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gggccgagcc acgcgtccac agaatatagc tatttgaaga aaaatttccg ggatttattc   60
atccgtgaag gttaccagct tgattacgta tttgattgga ctgtgtcaag gcaagctgtg   120
gacaataaca gattgcgact gagcgggaag acaggtggct tgggtgggacc atctgtggat   180
agggctgaac gagctgcagc aagacaagat gttccagata gattcactgg tcaagctggg   240
gcttttgcta gaagaaccgg ctctggttct ggtcaatacg gagaacacac aaagcacagg   300
actctgttgg attcacttat ggcatccaag atggctgttg attcagataa aagaaagcat   360
tcatcatctc ggaatggaag cacatcaagg aaggctcttc tgtcaagc                   408
  
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<210> 7834
 <211> 452
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-008-Q1-E1-G11

<400> 7834

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gaatccagta gcaacaatag agcaacaatg gcgaacaaga taatttcccc tccttaaggc   120
ccttggctct ttccgcaagt gttggcaaag cgacaatttt ccctcaatgc tcacaagctc   180
ctatagcttc ctttcttccc ccataccttc catcaatgat agcttcagta tgtgaaaacc   240
cagctcttca accctatagg ctccaacaag caatcgcagc aagcaacata cctttatcac   300
ccttgtttca acaatcgcca gccctatctt tgggtgcagtc attgggaaaa accatcaagg   360
caaaagcagc tggaacaact cgtgctacct gtgattcaac aagtagctct ggcaanactt   420
tctccctact ctcagcanca acaatttctt ca                                   452
  
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<210> 7835

<211> 418
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-008-Q1-E1-G12

<400> 7835

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ccaataatac caggcccaaa ggcctaggag gaaaaagata aggggtgcccg tttctctcct 120
cgacgacgac attctcaact ctgaaacggc gatgtcacgg ctactcccgc cctgtctctc 180
tcctttaccg gcgttctcgc tgccgcgcgc gcttcttcct cgcattccaca tccgcacgtc 240
ggcggtgaga ggcgggtgcgg cggagaacgc gatggcgctc gggacgacgg cgaggagcgg 300
gcgcctggtc aagggtgcggg aggagcgcgc ccgccgagag tacgaccggg agcacaccta 360
ccccggatgg gccaaagtac tggagaacgc ctgcagggat gatgangagc tccgcgcc 418

<210> 7836
<211> 410
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-G3

<400> 7836

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tgtcgtcttc aatagtaggt ctgccgcagc tttcgcattc aagactctcc atgctcaagt 120
gtatgataaa tggacagtta tggaaactcc tgaacaacgc cagataatat ggtccaacct 180
tccaaggaaa ctatatgata ggcaaatcag acaatgtgtg gtttatggca ttgtctttct 240
catagttgtg ttctatatag ttctctctac tgctatcgct gctgttataa ccctggaaaa 300
cctggaggcg aagctgccct tcctgaagcc agtgggtggag caaccagcaa tcaagacggt 360
cttggagggc taccttcccc agattgcact caatgtgttc ctgcattgc 410

<210> 7837
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-G4

<400> 7837

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gctacagtgc acacgctagc cgatcaacgg ctacacgtac caggcgctct acgcggatgt 120
gccccctagc cagcttctct ctccccctcg ttctgtggtg cctctctcac cctctctaata 180
attgttcacg tggggccact tccaattatt agtagatgaa aaattgatag gaggtgaaaa 240
gtaggtatag aaaatgatat tttatggttg tagtggggta taggggaagg atttaggggg 300
aaacgctgta cagagtggag atataggggg gaagagaacg ctgacgttgc accttaattg 360
gaatttagga aaagacattt gggcgtaacc gctgaagaca gtctaaaggc tcatctgtgt 420
gta 423

<210> 7838

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-G5

<400> 7838

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accgccgcga cgacgatggc agcctcgctc caagccgcgg ccaccctgat gcagccggcc 120
aagatcggcg gccgggccc ctttgccctg ctgccgtccc gcccgctcgc gcaactcgcc 180
tgcagggcgt tcggcgctga cgccggcgcc gccaggatca cgtgctccct gcaggacgtc 240
gccagcaggt gcgtcgacgc cgcgaagctc gccggcttcg cgctcgccac ctccggcgctc 300
ctcgtctcgg gcgcgagcgc ggagggcacg cccaagaggc tgacctacga cgagatccag 360
agcaaaacgt acatggaggt gaagggcacg ggcacgggga accagtgcc cgcacat 416

<210> 7839

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-G6

<400> 7839

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tttgcacaa agctcaagat ttcagagtag gaaagagtgg tgtttcagaa acaacagaat 120
acgttgctgt taaaagtgac gctggaacgg tttgctgcac ttactgtttg tgtgtaaaaa 180
tagtgaagtt agtggaatga atgacccctg ccagtttctc ttaatgaatg attctggccg 240
gtttatgtta agaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
aaaacaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agggggggcc 360
gccccaaagg ttccaagctt acttacgcgt 390

<210> 7840
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-G7

<400> 7840

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atgggttagat tcttccctatg tgaactcagg tgtcaacgga agcgttgaag acgatgaaca 180
tgagaagctg gctaggtaca agagggaggc tgtatccata atacacgaat actttttctc 240
tgatgataca acagaggtca tccgtagtgt caaagagctt gggtatccgg aatacaatcc 300
gatcttcgtc aagaagctca taacaattgc tatggaccgc aagaacaggg agaaagaaat 360
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aggga 425

<210> 7841
<211> 352
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-G9

<400> 7841

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ctttagcttc atgctgctta gcgttagtaa agcctaagca ctagactaca caatagaggg 120
cgtgagcgat ggcgaagaag ggtaacttca atcttcggct ctttattgtg ttgaccccag 180

gttatatgaa ttatgttttt ggacaagatg tgtaacgtgc ctaaattcca gggttttttt 240
 tggcttcacg ggaccagggt tcccttgatg ggttaacgtt gcagcatgcc cttgcggatt 300
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<210> 7842
 <211> 450
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-H1

<400> 7842

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 gtacagcagg gatgatgtgg gaaagtcat tcccgtctat cttgctcagg gcatacctcca 180
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 agagagggggc cgcaaagcta ggcctaactt gaaggtgggc atttgtggag aacacgggtg 300
 agagccttcg tctgtggcct tcttcgcgaa ggctgggctg gattacgttt cttgctcccc 360
 tttcaggggt ccgattgcta ggctagctgc agctcaagtg cttgtctgag gctgcctcct 420
 cgttggcaac cgggattgcc tgetgctggt 450

<210> 7843
 <211> 134
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-H3

<400> 7843

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 actagaaaat ttta 134

<210> 7844
 <211> 405
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-H5

<400> 7844

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gaccccgctt ccatggaggt ggtgggcggc gtgtcgctga ggccgtcgcc agcgccggcg 120
cgtatccgga ctacctgcc acccgctgac gtaggcggac gcttccttct ccgccgggtc 180
gcggggcgcc agccggcgag gcgcgcgctg gtcgtggagg cccggggcgg caggggctgg 240
tcggagcggc agatgcagca gcagcgccgc gcgccgctgc tgccgaaaat cgaggacgac 300
ggcaaccgc gattcgatcat cttcatccgc accgccaatg tctacttctg gtaccgctc 360
aacatcatca cgggcgggtac gacggcgaag atcatgctcg ccgcc 405

<210> 7845

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-H7

<400> 7845

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ggctgttctc ggttctttac gcggaggcgg aggttggttt ctgatctggg gatcggttcg 120
tgcggggatg aatacgaggc cggtggtgct cgtcttctc ctgctcgtgc tcgtcatcac 180
gtcgcagttc gagtggaagc agcagatcgg ggaggccggc gacgccgacc cggccgctgc 240
ccgccgccgg cagcagctgc acgccaggga ggatgccgtc aaggaaaaga tcatattatc 300
acaggagaaa aatatccaac agcttaacca gcttatcgag agccttcagc gccagctact 360
gcactgccgt ggtagcaata aactgttca tgctgctgcc gccgtttgca acagaagcga 420
g 421

<210> 7846

<211> 293

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-008-Q1-E1-H9

<400> 7846

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 tcctaccgag ctccgggagg tggaatgggg tctggctgag tgcggccacc ccttcctatg 180
 ggtcgtccgg cgaaacatgg tacgaggctg cgacgtctac accgcacggc acctcccgga 240
 tggtttccag gaccccgta agggcatagg cgtgggtggc cgctgggccc cgc 293

<210> 7847
 <211> 423
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-A1

<400> 7847

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 agacaccttg tctgcaacgg aatgaatgac tgcacggatg gtaccgatga aaaaatgtgt 120
 gaaaactggg agtgcaattt tgatgaattg aaatgcccg cttccaacca atgtattccg 180
 atcgtctgga aatgcatgg aaccaaaca tgcaccaatg gaacagacga agaaaactgt 240
 tcagaaacat gccgaaccc tgatgatttc ttctgccag gagggccttg cataatcagc 300
 aaaaaacgct gtgacggtgt aaacgactgc tcgaacggaa aagacgaagc cgattgtaaa 360
 gatacgtaag actgcgacga ttccctttag gtcgttaccg ctttgttttt taaaaacatt 420
 ttt 423

<210> 7848
 <211> 354
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-A12

<400> 7848

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 attgaacaca atggcctaaa actggttaaa aaaagggaaa attctggtag gaaatggtca 180
 acaaggggca agaatccttg ggtccaaaaa ttggatggac caacaatggt aaaaaaccc 240

cagtttaacc aggaccatat aaccattgga tttaattgga accaaaaccg gcaaaatttg 300
ggccccaat ccaaaaaatg aaccattcaa ccctaaaggt taatgggagc aaat 354

<210> 7849
<211> 431
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-009-Q1-E1-A2

<400> 7849

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gagtttggtc caggtcaatc tcggagtcct aatgggcatc cagcatctcc aaatggtcct 120
ttagcatctc caggtggtat tccatcttca ccacaggacc ttctatcctc tccagatagt 180
accttggagt caccagtaac tgcacccca caagtttctg aatgtagcca gattagtcct 240
gaaggagatg ttgagggtgt ggggtgtaaag cagaacatgg atgacacgaa ccaccagaa 300
agtaaagatg gtgaagtgga gcctgagcaa accaaagctc ctgaaggtag agaagaaggc 360
gcagcggtaa aagatgctgc tgaagagttg attgcagccg agcagcccaa atcctgngct 420
gactacagcg a 431

<210> 7850
<211> 452
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-A4

<400> 7850

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ccagctcgga gcagatagag cacctagcta gttagtcgca actcgcaacg caagagtgtg 120
tgactagtga gaaccgacta ccgagtgaac gatcatggcg gcgtctctgc aaggcctata 180
caatgggggc agcggcttgg gcgggagggg cgtccacgcc aggagcggcg gtcgccggtc 240
agctgcggcg gtgaagcggc tgctgtcgag gttgaggcgc tcttgagaa gacgcacggc 300
gcggccgagg cgaaccgcgg tgaggttcgg gtagacctg catagctact aacagaactt 360

cgacgacggc actgccttcc ggcgccacca ccgcttgtag ctcattgact cattgtaccg 420
gaaccctcac ttgtagaaaa ataactgaaa gc 452

<210> 7851
<211> 463
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-A7

<400> 7851

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ggaatccagt agcatcacta gagcaacaat ggcgaccatg atattttccc tccttatgct 120
ccttgctctt tctgcatgtg ttgctaacgc gacaattttc cgtcaatgct cataagctcc 180
tatagcttcc cttcttcccc cataccttcc atcaatgata gcttcagtat gtgaaatccc 240
agctcttcag tcctataggc tccaacatgc aatcgctaga agcaacatat ctttatcacc 300
cttgtttcaa caatcgctag ccctatcttt ggtgcagtca ttggtagaaa ccatcatggc 360
acagcagctg cagcaactcg tgctacctgt gatcaaccaa gtagctctgg caaacggttc 420
tccctactct cagcaacaag aatttcatcc aatcaaccaa ctg 463

<210> 7852
<211> 459
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-A8

<400> 7852

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tgatcatgta gagaagataa aagcattccc aatggaaaca actataccat tccgagagcg 120
gctgaagata cttggccggg tggctaattc ggaggatctt cctttgagtg caccggagag 180
gaagctaattg catgcctata atgagaagcc tgtcctttct agaccacagc atgagtttta 240
cctgagtgat aactacttcg agatcgacat tgacatgcac agatttagct acatctcaag 300
gaaaggtttt gaaacatttt tggacaggct aaaagcatgc gtttttagatg ttgggctgac 360
aattcagggg aataaagctg aagagctgcc cgagcagatc ttatgctgtg ttaggttaaa 420

tgggatagat tacaccaa atcagcctct tttgactca

459

<210> 7853

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-A9

<400> 7853

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cccacgcgtc cgcccacgcg tccgagcgga gcggaggagg agagactgat ccacacgcaa 120

agggcatcga cagagaccga gcccaataat aaatcttgct ggatacatac aggaaacagc 180

gcgagggaaac gagaagttag tttccatgga gaagaagcag aagaagcacg cacacgcgag 240

gtcaaggagc ttcaccggcg gcgggctggc ctcttcctc aggtccaccg tctcctcctt 300

ctcctccgcc ttcccgccca gcggcaggag gtctccttc aaccaccgca acgccttctc 360

gggccccatc gtcgtctcca tcgtcccgcc ggaggctcgc ggcggcgggc gc 412

<210> 7854

<211> 379

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-B10

<400> 7854

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cacacacgta gaagatcgag ttcgttcgat cgtgaccgtg acgcaggaag ctataagcta 120

gccaaagacag gaataataat ggcgggcgctc acggtggcga gcctctctgt cccggtgacg 180

acgacgacct tcgcggcggc gggcgggcgcc gacgtgctga tcgtcgtccc gaggagggcg 240

ggcgccgggc gcgtcgtctg gttccccgcg gcggcgcgcc gcggcgggcg cagcgggcg 300

ttggtcgccg tgcggtccag cgggcccggc acgccgccgg agatctccga caaggtgtct 360

gatagcatca agcaggcgg 379

<210> 7855

<211> 246

<212> DNA

<213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-B11
 <400> 7855

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 tggctcacgc agttctgctc cacacgcgca acccaatggg atatgcatgc acctggcagt 120
 ttactcactg ctgtctactc tgtagccaag aacttccgac acagggcgccc agctgtatct 180
 gtcgaccgtt cacctggtcg atgagcggaa gatctaccat tcccaatctc aagatgcatg 240
 cagtct 246

<210> 7856
 <211> 410
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-B12
 <400> 7856

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 aacattatgc ctgcgaacgg agatgggttcg ggcaacaagg gcccgaattg agggtcacaa 120
 cctacttcag ggggcttcag gcgataaaac gctgcaacac accaagcatg tagcacctat 180
 gcccgagcag gaagcacgag atgcccttcc cggcatgggc gccggcggtg ccgcagcacc 240
 catcgccgac gacgcggaac aattcggcgt caacgagccc aagaaagacc ccaactgaaga 300
 agaggacgaa gaacccatcc cagaccatct gaagaccgac acctcggtcca agatctccaa 360
 gaagcgggac caaccggacc actcagctac ctcccccgag cgctctcacc 410

<210> 7857
 <211> 412
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-B4
 <400> 7857

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ttcgggtcga ttcccggcgg actacgtctc gtcggcgctc aggggaacccg tctacgaagt 180
gatagaagtg agatcaaagt ggaggatgtc caccatgaaa ataaccatgc ggcagctact 240
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gaattcaatg ccttccctgc tggtagctga gcaagctatt ttactcaatc gtgggttcgtt 360
gcgagcaatt gctatgtatg cgcgtgttct tatattcagc tataacagcc ca 412

<210> 7858
<211> 473
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-B8

<400> 7858

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaatctt cttcaaaatg ggggggggaa aaattttttt taaaaggagg ggggtccccc 300
cccttttggg gaaaaatctt acccccgggg tccccaggg gaaaaggagg gaaaaaaaaa 360
tttcccaaac cccccggggg gcccccaaaa aaggggaaaa cccccaaaaa aaaaattttt 420
ttaaaaaatt ttaaaacttt tttttccccc caaaaaaggg gggccaaaat ttt 473

<210> 7859
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-B9

<400> 7859

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gccctttccg ccgccgcaa aatggtgaac gtctctaaga ccaagaagac ctactgcaag 120
aacaacgagt gcaagaagca cactctccac aaggttactc agtacaagaa gggtaaggat 180
atcctgtctg ccaggggaaa gcgcggttat gaccgcaagc attcaggata ttgtggccag 240

accaagcctg tcttccacaa gaatgccaa accaccaaga aaatcgtgtt gaagctgcag 300
 tgccagagct gcaagcacta ctcacagcac gcaattaaga ggtgcaagca ttttgagatt 360
 ggtggagaca agaagggcaa gggaacatct ctcttctaag tttctcatcg cccat 415

<210> 7860
 <211> 410
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-009-Q1-E1-C1

 <400> 7860

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 gccccctccg cccgcccgcg acgacccgaa ctgcgccgtg gtggccgcgc actccaaggc 180
 cacctacgac gagcagtggg cgccccacaa gagcagcagc aagctgatgg tgatcgactt 240
 ctggcgctcc tgggtcgggc cctgccgctt catcgagccg gccttcaagg agctggcctc 300
 ccgcttcacc gatgccatct tcatcaaggc cgacgtcgac gagctcgcg aggtcgcaag 360
 gacatggaag gtanaggcga tgccaacgtt cgtgctggtc aaggatggga 410

<210> 7861
 <211> 422
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-009-Q1-E1-C10

 <400> 7861

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 ctgtacgcca acgaggtgcc caagaccgcg gagaacttcc gcgcgctgtg cacgggcgag 180
 aagggcgtag gcaagtccgg gaagccgctc cactacaagg gctccacett ccaccgcgtc 240
 atccccgagt tcatgtgcca gggggggcag ttcaccgcg gcaacggcac cgggggcgag 300
 tccatctacg gcgagaagtt ccccgacgag aagttcgtgc gcaagcacac cgccccgggt 360
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gt

422

<210> 7862
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-C11

<400> 7862

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gtacacccaa ccagagagag aatgtcggcg gcgctgttcc tgtaccctcg ccagaacatg 180
agggttggtc cattgccgga gttcgtgaat ggcggtaaag agcggtatgg atcaacggat 240
tatgaggaat ttatgaagca ttactttgca acgaagcttg acggaaggaa gcacctagac 300
agattgaagt tggagcagta ggcagtagct atctctaccg tatctatctc gctggaggga 360
ccaataaata atttttctat gcgatatata ataatggcg accacaa 407

<210> 7863
<211> 432
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-009-Q1-E1-C12

<400> 7863

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gatgtgctca aggccagccc aaaaccactc cctatagaac cccatttcag ctccagctca 240
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ctgttccaga aactgggcga tgatgccang aaggaggtag acagctaccg gcatatcgtc 360
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caggagacgg ag 432

<210> 7864
 <211> 440
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-C3

<400> 7864

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ctcatccgcg acggccgcac ggagaagtgc tactgggcgc ccaccgcga ggaccgcac  180
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gacgacgagg tccgacggtg ggtgagcgag accggcgtcg agaacatcgc caggaagctc  360
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<210> 7865
 <211> 451
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-C6

<400> 7865

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tcccctgctc atctcccatg gtggccgcag ggagctctgg atccatggcc gtcggcctct  180
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cactcgatgt cctctatacg tgaacaacag c                                     451
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<210> 7866

<211> 453
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-C7
 <400> 7866

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 caagatgatt gacatcaatg gatatgcatg ctttctgacg agaactggct acaccggcga 180
 agatggtttt gagatctctg ttccgctcaga gaatgcagtc gatcttgcag aggccatcct 240
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 ggaggcaggc ctgtgcctgt acggcaacga catggagcag cacatcacgc cgggtggaagc 360
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 cgtgatcctg aagcagctcc aggaaggccc aaa 453

<210> 7867
 <211> 446
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-C8
 <400> 7867

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 gtgcacacgg attgcaacag tgagtctgga gaaacaacct tgcactgtga gcatgtgctg 180
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 aaggcccaag aaacagttgt tccatcttca atttgaattg tgtgagacgt tcgggatggt 300
 gattttggca acaaactact actatttggc aaaaagatca gaatggttac tagcgtcctc 360
 tattggaagc aagtcacaca gggcgagacc taaactaatt taattatgaa gtgtgaacaa 420
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<210> 7868
 <211> 387
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-C9

<400> 7868

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catcacctgg tgccccgccg ctctgagctc gcacgtcgtt ccgccgagga gcctgctgtg 180
agccgttgcc gagatcgcca ttgttttccg cgctccgagg aatcgacgat caagcgtcgg 240
cgaccaaagt atcaagctct ctgagtttta tgagggtgaa gatcctgagc atctgttttg 300
tgaagacgag caagctgcag aggatcctga ggttcaacaa gtagagatag ctgagcagga 360
gctcattgaa ggagaagaac aggtggt 387

<210> 7869

<211> 463

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-D10

<400> 7869

cggctctagaa ttacagggcc gacccacgcg tccaccacg cgctccgcgga cgcgtggggg 60
ctctgggtcag attggcggtt cccgtgttct tcttctctgc agcggcggag ttgcgcggcg 120
ggacgcgggtc gccgtcggct ttctgacaaa acgccatcta ctccaaccgc atcaccatct 180
tctccaagac ttactgcccc tactccatgc gtgctaagca catatttcga gaccttaagg 240
aagatccata tggtgttgaa ctagataccc gagtggatgg gcgtgacatt caaagtgttc 300
tcttggtgacct agttggggtt cgtactgtgc cacagggtgt tgtcaatgga cagcatattg 360
gtgggtcaga cgatacagta aatgcgcttt caaatggaca gctccagaaa cttctcggga 420
agagtcagtc acaatgatgg gtcgctggac aagcttgac tgt 463

<210> 7870

<211> 401

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-009-Q1-E1-D11

<400> 7870

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tatgcactta gtgtgaacca tctgggttcgg taacgttggg ttggtttcagt gctgggtaac 120
atttgcttgg taacattctc tagtaaccaa actttgctat ttggacagtg gaagtttgca 180
tacatttcac tcgggtcgcc tgactatctt gaagattcag atactgtagc cctaaaattc 240
cagagaaaca tgtatggagc ttgggagcag tatcttggac tggaacatcc ggacacggct 300
cctaagaagg cacacacggc taatcagaac cggcattcat tcgagagacc tgtaaaaatt 360
tataactagg catgttagan attgagcgat gagctgccg t 401

<210> 7871

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-D4

<400> 7871

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ggatgctggt ggcttggttc gccaatctag tgttgcttc gaggtgatca ctggtttcag 120
gctgtacaag agcggagttt aactagcga ccattgtgga actacaccga tggatgtgaa 180
ccacgctggt ctggctgttg gctacgggtg cgaagatggg gtccctact ggctcatcaa 240
gaactcatgg ggcgctgact ggggtgatga tgggtacttc aagatggaaa tgggcaagaa 300
catgtgcggg gttgctacgt gtgcaccta ccctattgtc gcatgaaggc cttacgaaat 360
gttacatggg ctggttgga tcaataatgc atgtttaacc tg 402

<210> 7872

<211> 464

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-009-Q1-E1-D6

<400> 7872

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gccttgctca agcttccggc ggcgagtttg tggcgactga cctcgtcgac gtgctgctgc 120
agctcagcga ggagagcacg aagctggagt cggagtcgga ggccaggctc cctcgcgacg 180
gcgtcaaggc cctcatccag gacatcatcg ccggtggcac ggagagctcg gcggtgacga 240
tcgagtgggc catggcggag cttctgcgac acccggaggc catggccaag gccaccgatg 300
agctcgaccg cgtcgtaggc agtgggcgct gggtcgcgga gcgcgacctg ccggagctcc 360
actacatcga cgccgtcgtg aaggagaccc tgcggtgcac cctgtcggcc cgctcctcgt 420
cncgcactac gcccgcgagc gcacggtggt ggccggctac gacg 464

<210> 7873
<211> 452
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-D7

<400> 7873

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gagggtttct gggcgcgag cgggaggcgg cggcggtat ggctgcggcg gaggaggaga 120
tcgcggtgaa ggagccgctg gatctgatac gcctcagcct cgacgagcgc atctacgtca 180
agctccgatc cgaccgcgag ctgcgcggca agctccatgc gtatgatcaa catttaaaca 240
tgatacttgg agatgttgaa gaggtcgtga caactgttga gatagatgat gaaacatatg 300
aagaaattgt gcgcaccacg aaacgcacta tcccccttct ttttgtccga ggtgatggtg 360
tcatattggt ttctccacc cttcgtacgg catgaagttt gaagttagat catgctgggt 420
gttaattatg ataactggtg tatitggcca ct 452

<210> 7874
<211> 465
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-D8

<400> 7874

attcccgggc ccgaccacgc gtccaccac gcgtccgaaa gtgcaaggag atgccacagt 60
ggatgctgtc tttgctaaga tcgacgagct gctgggttct atcctggaga agaaaaatga 120

aatggtgtcc agcacatgag caaggggaat atatctgaag cacaggacga cacgtacaag 180
 taatgtaagc cagtctcacg taatggaaat ttctccatgt ggatgtggtc aaagcatagg 240
 attttttttc tccaattggt aactgtacgc gaatggaagc gacagatcat tcgtaggttg 300
 tgagggcttc aaagatcatc tgctgctgta catgttttgt tgctgtcttg tgaacataca 360
 tgtcttggtg ttctcact ggaggaatgg tgtaacctg ctgtatcatt tccttgaatg 420
 gcttacgtga gagggaggag gacctgagca gcagctcttg caatc 465

<210> 7875
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-009-Q1-E1-E1

 <400> 7875

ggtcaagnat atccgggtcg gccacgcgt ccatctaate gttggcttct gtacacggaa 60
 caagcacctt ctgcatggct gaattttgca ttgtgtggct tgggtgggat cgtcacagca 120
 tatgcttttg tttggatttc gaagtattac acggattata aacacgagcc agtccggctt 180
 ttagctcttt cgagttccac aggacatgga actaatatta ttgctggagt aagcttggga 240
 atggaatcaa cagcactacc agttctagt ataagtgttg ccattatata agcatattgg 300
 ctggggcaga cctctggctt ggtggacgag tctggcaacc caactgggtg tctttttggg 360
 acagctgtag caacaatggg gatgcttagc actgcagggt atgttctcac catggacatg 420
 tttggtccta tagctgacaa 440

<210> 7876
 <211> 436
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-009-Q1-E1-E12

 <400> 7876

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 ccaagcgcag ccgcggggcc gccgtccctg gcccgccat cgagcagcag ccacctgcgg 120

cgcgccggca ggcgcctcca gcccgctctcc gtcccgcgcg ccttggtgca ggggcggagg 180
 cgccctcacgg ggcgcgtccg agccgcgccg gacgcgccgc cgggtggcat ggcggccgtc 240
 agcgccgtca ccgagctcct cagagccctc tcnccgaaca aggcgctcag gggcgctgct 300
 acccagcagc agcaggtcga ggagccggag ccggatccgg acccgacctg cggcagcgtc 360
 gaggacgtgg tcgccgtgct ccgagacgat ttacgggcgcg cctacttctg caccggggat 420
 ttcactccgg gaatat 436

<210> 7877
 <211> 393
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-009-Q1-E1-E4
 <400> 7877

acgcgtccac ccacgcgtcc gcagatcgag aggtacagca cgaaaaagag aggcaagaga 60
 gataggggac cggagggcgg cgggccgggg cccaagaccg aggggctctt gcgcaggaag 120
 ctgatgaggc tcctgtcgtc cgtccccttc ggctgccgtg ctggacctat cgacgacgcg 180
 ccgcgcgccg tggaccacgc cgccgccgca aggaggcgcc ggaggaggag ggccaacagg 240
 gccgcccagc tgctgggggc tgctgcgggt gcgccgcagc agtggcgccc ctgcctcggc 300
 gacatctgcg aggagtacag cagcagcacc gacgcgtca aggtcangaa ggcggcgctc 360
 tgggaactcg cccgggcgct gcccgcgcg cac 393

<210> 7878
 <211> 348
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-E6
 <400> 7878

aattcccggg ccgaccacg cgtccacca cgcgtccgcc cagcgctccg cccacgcgtc 60
 cgcccacgcg tccgggacca atgacaagga gaagggtggc gatgtcccca acctgcagct 120
 caccttcagc cagcaagcaa ggagaagcac cggcttcaag caaaaggaga ttaattatct 180
 agctgactgt gatggattgt atgtcatttg catgtgtttg ctacttatgc gatggacgtg 240

taagccatat attgtatattt attgttagaa tcaggcaccc ctgaattata ttgttgcaaa 300
 aaaaaacagt taacaacata aaaactgtat gcttgaaatt tgtaacat 348

<210> 7879
 <211> 403
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-E9
 <400> 7879

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 attcgcgagt tctccctcct ctgccgccat ggcgctctct gtggagaaga cctcgtctgg 120
 acgggagtag aaggtaagg atctctcgca ggcggacttc ggccgcctcg agattgagct 180
 ggccgaggtc gaaatgccc gcctcatggc gtgccgcgcc gagttcggcc cgtcgaagcc 240
 cttecgctggc gctaggatct cgggggtctct ccacatgacc atccagaccg ccgtcctcat 300
 cgagaccctc accgcgctcg gcgccgaggt ccgctggtgc tcttgaaca tcttctccac 360
 gcaggaccac gccgccgccg ccatcgccgc cgactcggcc gcc 403

<210> 7880
 <211> 442
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-009-Q1-E1-F10
 <400> 7880

ggtctagaat taccgggccc acgcacgcgt ccaagctaga agcctacaac tagctgttcc 60
 ttagctagag ccataaagga attgagggtta caactcaacc cctgtttgaa cggcactgca 120
 ggttgctgta naggcaattg tcgaggtcgg agatgcaaag gaggtgatat gtgaagtggc 180
 tgagaagaaa aatgtcgatc tgctggttct tggaagccac agtcgtgggc caatacagag 240
 gtatacatgc atcttgacc catcaagagt taatcctaag cacttggtca ctggtttct 300
 caccactatc cttcatcgtc gctgcagggt gttccttggg agcgtcagta actactgtgt 360
 acatcattct aagtgtccag ttcttggtgt gaagaacaaa gctgatgaag gattcaactc 420

ccagctgcta gtcctaataca tg

442

<210> 7881
<211> 461
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-F2

<400> 7881

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ggcgaccatg gctgtcggaa agaacaagag gatctccaag ggaaagaagg gtggcaagaa 120
aaagaccgtc gaccctttct ctaagaagga ttggtatgac atcaaggcac cgtcgggtgtt 180
cagtgtgcgc aacatcgga agactctcgt atccaggaca cagggtagca ggattgcttc 240
tgagggtctg aagcacagag tctttgaggt ttgcctagct gatcttcagg gcgacgagga 300
tcaagcttac aggaaaatca ggctccgtgc tgaagatgtg cagggcagga atgtgtcac 360
aaacttttgg ggtatgaatt ttaccactga taaactgaga tccctagtga agaagtggca 420
gacattaatc gaagcccatg ttgatgtcaa gacaaccgac a 461

<210> 7882
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-F4

<400> 7882

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ggaagctcaa gttagaagaa ccaccattga ctgatcaatg gcggcccagg ctctcctctc 120
cggccggaac ctgctgggac gcccctgca gtcggccgtc tctaggtcgt cggcgaggaa 180
ggcgcccttc gtcgtcaggc ccagctccag ccctccagcc aagcaagggt cgcacaggca 240
gctgtgggtc gcgtccaagc agtccctctc ctacctgat ggcacgctgc ccggcgacta 300
tggtttcgac ccgctgggac tctcggaccc ggagggcacc gggggcttca tcgagcccaa 360
gtggctggcc tacggcgagg tgatcaacgg ccgctacgcc atgc 404

<210> 7883

<211> 482
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-009-Q1-E1-F8

 <400> 7883

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 ccgggaagag cctcgccatg gccaccgtgg cttcttggtc cgcgacgctg ctgcacgagt 120
 tcgagctgct cccctcgccc gtcgacctgt cggagggtgt caagctgtcg tgcgagatgg 180
 ccgtcccgtc ggcgtgggcc gtgacggcga ggccccggca agcggttcag aagtcggttg 240
 gggatatcagt ctactgtga gcaatagcat ggcgggctgg cgctactgta catggaaagt 300
 gcttctgctt gcaggttgct actactcggc cgacatgggt atatgctttt catgttactg 360
 tctttgatgt gtatcgatca ggtgccgaat gtgatacttt ggcttgtact gttagctctt 420
 ttctggtg ctcttttctt tccttttctt agtactcgtc gttagactcg tcaaagtat 480
 at 482

<210> 7884
 <211> 438
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-009-Q1-E1-G10

 <400> 7884

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 acgaatacga accccaatcc agggccggag gagggcgagc gaactcaaaa gcaagccgtt 120
 ccagtccaat ccgcctcagt ccaaatactaa tcgccgggtt taggcagaag gggcgggacg 180
 cggcgagggt taagcggggt ttgttttgtc ctttcgtgc gattctgctc tccgcggggg 240
 aggcaagtac tgacggaagc gaaggcgaag gcggaggagg ggtccccgg cggtggaagt 300
 ggaacgcgcc gatgcgcaag tttcaggact ccatcaaggc cctccaggcc gacatcgatc 360
 acgccaatgc gatggcgctc gaattcctga gggactacga cggctcggtc atccagatgc 420
 ggggtggcgta cagcgccg 438

<210> 7885

<211> 414
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-009-Q1-E1-G11

 <400> 7885

 acgcgtccat gtcacccac tcgtgggact gggcgtgcc aagcaccagg aggctcggct 60
 gcctcaagaa gggcggaggc ggcgcgcaca ctaatggcgg cgtggcagag cagagcgtgg 120
 aagagcagag aaaggatatg gaatcggcat aacatttctt tcgccttttt gtcctctctg 180
 cctttcaaat ttcttccttt tttttaggga atttaggtac ttcggtcaat ctcaatggcc 240
 attgtttcat ttacagttt ttaacagtgc tacgtcaggt ccataagata gttttatcct 300
 gcggtttcat agcccatact gaaccttga cagggcgtaa attaataagag gaactagggt 360
 agatgattac atgacagtca actgaactac tgcaagaaga aagatatatc tccc 414

<210> 7886
 <211> 442
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-009-Q1-E1-G12

 <400> 7886

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 gtgctgtacc ttcttctatc tattaatgga aagatacgca gatctcctaa aaaaaaaaaa 120
 aaaaaaaaaa aaaagaaaaa aacaaaaaaaa agataaaaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaaaaaga caaacgaaaa aataaaaaaa aagacaaaaa aaaaaagggg ggctgccccaa 240
 aaggatcaaa gctaaatacc cgggtcaattc aaattaaaac cgcttcaaaa gagaccccaa 300
 agtcgaaata agggggccgc ctttaaaaaa cacttgacag gaaaaaccct gagatatccc 360
 aactaaaccg cgttgaaaaa aatccccctt ttaaaagctg aggaaacaca aaaaaggccc 420
 gaaccaatcg ccattccaaa aa 442

<210> 7887
 <211> 405
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-009-Q1-E1-G2

<400> 7887

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cncgtctcnc ctcttcctcc tcccctgcga tctccaccgc atcacctccc tcgaacccta 120
gaccaccca cgcgcccatt gccttcggtc gccatgtccg ccgctcagct tctccgtcac 180
tcgcgcaagc tgcggagttt gcaaaatcct gtaggttggtg agaatttttag ttttggtcgg 240
catttctcca gcggttctgg gtcctttatc gccagggaaa atggtattgg naaagaacc 300
agaggtacca gattttccca gcataaccag cctgcaaaac agctcgagac attctcagca 360
ggagtaaattg gaagctgcac atggagaata gcatccaaca gcctt 405

<210> 7888
<211> 448
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-G3

<400> 7888

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gtttcggagg aagctgctgg tgctctggct ctgctgatga agcagcctag catcgtgcac 120
cttgttggta gctctgaaac agtgatcact agccttggtg ggttaatgag gcgtgggact 180
ccaaagggca aggagaacgc agtgtcagct ttgtatgaga tatgccggag aggtggatcg 240
acattggcac agcgcgtggc aaggataccc gggttgaaca cggtaatgca gaacatcacg 300
ctcactggaa cgaagcgtgc caagaagaag gcaagcctga tcgtcaagat gtgcaaaaag 360
aaagcaaattg ccatcggcgc tggcgctagg aagtaccttg gcagtgggtg atcattcggt 420
ggtagggaac agcagattga ggcgcgct 448

<210> 7889
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-G4

<400> 7889

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 tcaaagatat tgtgcactgc cgtgcggaaa ttagggattt tgatgctttt gatttgcgat 180
 tgaggcttcc tgctgtggtt agcaaattgc acaaacttat caactgtaat ggtgggtgtaa 240
 catatataca ttgtactgct ggacttggaa gagctcctgc tgttgcaattg gcttatatgt 300
 tctggattct tgggtacagt ctcaatgaag gacatcggct gctacagagt aaaagggctt 360
 gctttccgaa gttggaagcc attaagttgg caactgctga cattctgaca ggattatcca 420
 aaaacacaat cac 433

<210> 7890
 <211> 354
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-G8
 <400> 7890

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 cgagacctac tccgtcacc cccacgtgcc gggcacctac ggcttctact gcgagccgca 180
 ccaaggagca ggaatggtcg gcaagatcac agtcaactaa agctagctat ccattccatg 240
 catctcgatc tgtatgtact ccgcccgtcg atggatgatg catccatctc tacttgtttt 300
 cctcacatgt acaacaatta atgcaacaaa ttaagtacgt aaaaaaaca ccaa 354

<210> 7891
 <211> 445
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-009-Q1-E1-H6
 <400> 7891

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 ggaagcgaag ggattctggc aagctgatgg ctgcagatcg atctcggat ccattgggtgc 120
 cgagagcatc tcgccaagag ccagagcagg gctgggttca gcaacaccag cggcgtacaa 180

catgccttga gcagcagacg tatgggctgt tgccctctgc aagaagctct ccagcgacac 240
cagggcagc tccatcttct caaacggctc ggcgctcaga aggcggatcg gagacatgac 300
tggcgtctcc gcgcccaccg tctgcaggaa cggcacctgc tgttcttcga ccttgggttc 360
gtcgacgaag aagtccatct tcggaaccct cctcttcttg ctgaagtggc cgcggccgct 420
cgccgacccc cccgaaacga cccc 445

<210> 7892
<211> 446
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-009-Q1-E1-H9

<400> 7892

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tgctaccagt gatcagccaa gtagctctgg caaaccttct tccctactct cagcaacaac 120
aatttcttcc attcaaccaa ctgtctacac tgaaccctgc tgcttatttg cagcaacaac 180
aactactacc attcagccag ctagctactg cctactctca gcagcaacaa tttcttccat 240
ttaaccaatt cgccgcactg aacccctctg cttatttcca gcagcaaata ctactaccat 300
ttggccagct agctacaaca agccccgctt ccttcttgac acaacaacaa ttgcttccgt 360
tctaccagca gtttggtggc aaccccgcaa cccttttaca actgcaacag ttgctgcct 420
ttgtccaact tgctttgaca aaccca 446

<210> 7893
<211> 460
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-A1

<400> 7893

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cgctcaacttt attttattta tataatacag tccatttagc taattttgtt tgatgtgcag 120
tgacacgacc ttgacagtca agatgctctt ttaggttatt ttctcctgaa gccacttctt 180
ttgcgatctc ctaatgttat ggtcccatta catctccatt cattgcacga gatgggtcca 240

attaccttac atggatctgt tggacacaag gaagccatcc agatatgcta ttaaaaatcc 300
 tgctagtcac tatggcttta aattgtacca tgtatgttct attttcagct aggcagagca 360
 tgttctactt acagcagggc agcagacacc aggcattaac gtgatgtatg agtcacatat 420
 caagatggca atttttttgg cagctttcac agtgaatcag 460

<210> 7894
 <211> 419
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-A11
 <400> 7894

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 ttggtagaaa agcttgggaa ggtgtttgag aagatactgg aagagactgg caaattgagg 120
 gaagaaatca atgaagatat gtctatcgca aaagccatcg caattgttat ggctagaaat 180
 ccgcacttga ggcaagaagg gattgctcat gaggttcttc agtggtatTT gtgccgtatg 240
 gagggttggg ttgccaccga cgctgattca atttcactac agggttggga tcaggagggtg 300
 ctgcttccag gtggccatgg cctcatgggt cgtgggtatc gtccgggttat aaatactctc 360
 gcaaaaagct tagatatacg cctcaaccat aagggttggtg aaattgtttc gcataggaa 419

<210> 7895
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 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-A6
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 cccatctatc tctcttctcc cccgcctgtc tagccagcgg cggccaccac caccgttcag 120
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 cgcggcattt ctcgttcccg ccgccgagga tcgcggcggg cggcgagtcg tgcaggaagc 240
 tggcggcgca tgtggacctc ggccccgcgg tcgtgggggtc ctgtctcgac tccatgaagg 300
 cctcgtcgcc caggcatagg ctcatgggtc ccgtgcccgg caccgccgac gcggagcatc 360

acgactggat ggagctgcac ccgtcggcat tggaccgctt cgacgcgct

409

<210> 7896

<211> 459

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-A8

<400> 7896

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tgccggggaa gctgctcctg ctgtttttga ctttaaccaa ggtggcaacc ctcttctgctc 120

tggtggtctg aacttcaact gatacagtct ttgatcgaaa ggtgttaat tccctcagtg 180

atgggcttgg cattggcttg tctgacaaa tgtagtctgg tgcactccac gtgggatata 240

atggtttgtg gtgagtccaa taaactcaag atttcgaagg gagatgggct gagcattata 300

ttcccaagtg aaccatggct atcaatatcg cagggtctgt aacaaggatt atataatcgt 360

cgaacattag agcgtgggtt cttgagaacg ctactctagg ttgtgcgtcg ttttaattata 420

tctggctact gtaaggcatt cctgattggt ttggttttt 459

<210> 7897

<211> 330

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-B10

<400> 7897

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gccgccattc tcccatccgc ccccggtccc ccgccgccct tccctaacct cgccgcggca 120

gacgtcgcgc cgtgcgtagc tagcagttcc ccggcgcacg cgcgtcggat aagaattggt 180

tttggctcgt cggctcacc cagccatggg tcttcgacg cccattcccc cggcagtagg 240

ctcaagctta ggaactcgca accgaggatg aattggacgc ttcgtgatgg cgggcgcgaa 300

ggcagatgta tacgcacaaa cgggaaatgt 330

<210> 7898

<211> 432

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-B11
 <400> 7898

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 gctaaactat tgacaatgta tcttggttctt tgttgaaaag tttagtactt gagtgtcaat 180
 catatttcag agtcattgtg atatactgag cttggaggtt ttggccattg atctgcagaa 240
 gttcaataca attggaagaa taagttaaaa aaaacgtggt ccaaagtaac cttcagcagt 300
 aatgtttgtg tgctaaatgc tcttccggag aattgtggtg atgcaaacct tgtaccaatg 360
 aatatactgt caatctgcta tcttttccgt ggcctctaac tcttagagtg tgtttggttt 420
 gagttgagga at 432

<210> 7899
 <211> 294
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-B4
 <400> 7899

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 taaatcagga tctcggtaga agtcgagtga tttttctagc actcgcgaga ggtcaggaat 180
 tggttgtatc cattttgata acagaatgat gatggtctgt ggacacggat ccatgtggat 240
 gtgttgtcta tgagacgaaa ttggaataag gattaacgtg cagatacctg tgtc 294

<210> 7900
 <211> 453
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-B5
 <400> 7900

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gaggtctggt ttgccttgtc ttggcttcta gatcagttcc caaaatggta tccaatcaac 120
 cgtgagacat atcttgacag gcttgacattg aggtatgata gagagggaga gccatcacag 180
 ctggctccca ttgatgtctt cgtcagtaca gtggatccat tgaaggaacc tccactgac 240
 acagccaaca ctgttttgtc cattctttct gtggattacc ctgttgacaa agtgtcatgc 300
 tatgtttctg atgatggttc agctatgctg acttttgagt ctctctcaga aaccgcagaa 360
 tttgctagaa agtgggttcc cttttgtaag aagcacaata ttgaaccaag agctccagaa 420
 ttttactttg ctcaaaaaat agattacctg aag 453

<210> 7901
 <211> 448
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-B7
 <400> 7901

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 gctgctgggg cagcagggtg tagttggcgc cgtcgcctgc cccagttct gcctcgacgt 180
 ggactacgtg acttgcccgt cctccggctc cgagaaactc ccggcgagct gcaactgctg 240
 catgacgccc aaaggctgca cgctccatct ctccgatggc acgcagcaga cctgcagcta 300
 gctctgaacc aaagtgtgcg tgattcgatc tggacaaaga ccaacctgct ggttttcgca 360
 aataaagctt tcgcgcctgt atatggccat ccgaataaat gtgtgatcgt ctatatagaa 420
 acgtgaaaaa ctatctatat atatatat 448

<210> 7902
 <211> 262
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-B8
 <400> 7902

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 actttaggct tggcgggacg gtgggagcag gtgcgcagtg cgcttctgtc ccggaactgt 120

gggatcttgc tcttgccgtg ccgtgcttca ccgcttcttg ttcgtcatgg tatacatgta 180
 tatggaatgt cttctgggtg ccgacgaaca tacacaaata cacaataaaa tcacaaagaa 240
 aataaaaaag acataataaa ac 262

<210> 7903
 <211> 414
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-B9
 <400> 7903

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 tttttttttt tttttttaca atacaatcgt acatatagta cgttttattc gacaagcagc 120
 ctctgcatgc aataatagta caacccccga tttaattaat tggactaatg catgctgagg 180
 atggatcaga tggagatgct gctggggatg cccctcccg tgactcccg cttggagaag 240
 ggcttgagca gctcgtacgg cactgacccg gcgcgcgagc ggttcttgag gtccagggtg 300
 ttgttgcaact cgtcgatgaa cccctcgatc tcttcatcc tgccgcgaa cttctcgaac 360
 gccgccttca ccatgggctc cgcagccac gacggctccg cgaactcccc caag 414

<210> 7904
 <211> 381
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-C1
 <400> 7904

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 cggcggaccg gaagcgggtg atggcggagc tgggcgccga caagctgcgc gtgcaccagg 180
 tgggtgtggc cggcacgcac gactcggcca ccaacaagat cggcgtgccg ctggtgaccc 240
 gcccttcgc gcagtgccag tccatgtccg tgtacgagca gctggccatg ggcacgcgcg 300
 tcgtcgacgt gcgcgtgcag gaggagcgc gggctctgcca cggcatcctg gcgacgtacc 360
 ccgtggacgt ggtgctggac g 381

<210> 7905
 <211> 444
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-C12

 <400> 7905

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 gtcctccac aaacaaagcc accaccatcc caacccaaac acatcgggccg accacgggcg 120
 ccgccatgtc caccgctgac gggcgagcc cggccctggc gccggactgg gacgcgccgg 180
 cgggcgaagg cctggccctg gccagttcg ccgcgggctg cttctggagc gtggagctgg 240
 tgtaccagcg cctcccaggc gtggcgcgca cggaggtggg gtactcgag gccaccgcc 300
 acgccccac ctaccgcgac gtctgcggca acggcacggg ccacgccgat gtggtccgcg 360
 tgcactacga cccaacgcc tgcccctacg acgtcctcct cgacgtcttc tgggccaagc 420
 acaacccac cactctcagc agac 444

<210> 7906
 <211> 366
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-C2

 <400> 7906

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 ccggtgagct ctctgatga tgttctacag gcccgaagta attctgcgtc accgggcaaa 120
 aagggttga aaggagtcag caagggcagt tcaccaaca actcgtgtga cgttctgtgc 180
 aatcagttcg gttacattaa aatctcagat tccaacaatg cgctgcagaa tctggtcgtg 240
 gacaggcccc cttaagctgt acctgcacat ggtcatagaa cctccagcag cttactcatc 300
 ttactttcta ccatactttt ttaaaaaact ttcacattat aaagaatata gtctatggta 360
 taaaat 366

<210> 7907
 <211> 430

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-C4
 <400> 7907

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 agacttattt gttccttggg gctggggaag ctggaactgg tattgcagaa cttattgctc 120
 ttgagatttc gaaacagacg aatgctccaa ttgaagagtg ccgcaagaag gtttggctgg 180
 tggactcaaa gggtttgatt gttgactctc gtaaaggctc tcttcagcca ttcaagaaac 240
 cttggggcgca tgagcacgag cccttgaaaa ccttgatga tgctgttcag tccatcaaac 300
 ctacagttct gatcgggaca tctggagttg gaagaacatt cacaaaagaa atcattgagg 360
 ccatgtcttc cttcaacgag aggcctatca tcttttcact gtcaaaccce acctcgcatt 420
 ctgaatgcac 430

<210> 7908
 <211> 445
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-C8
 <400> 7908

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 atcaagcatt ctgcctcgc catgatactt acttgctctt agtcttttgt tgcacgagt 180
 agacatggta aacggattta ttctaaggta tctgaaccac gtaagcgtct tcaactacact 240
 atcatctcca aactcacgc aagtaccctt cagcatgctg attgctatgc tacattcaat 300
 gaccttaatg cggccgtgtt tgatgcaaca aggtcacgt tcacccatt gatcactgat 360
 gttttcgtgt gtgggttcaga atcatgataa gttggattaa tcagatgtgc agatcgatct 420
 gttgttaatt cagatctcgt taatt 445

<210> 7909
 <211> 391
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-C9

<400> 7909

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acactgcacg tcctacgtga ccgcgcggtg atctctgggg gtcccgacg ttgtggtttc 180
aataggtagg ctaggggatg ggaacaaccc tggcgagttc aatccgatac tgcaggagac 240
agtcatggaa gtatcgttcc cggctactgg agagatgcta gatttagtgc ccttattgct 300
gccgcatttg gtgcagcagg gcacgcgtga attccattga ccaactgttct ttttgtttagc 360
ggttcacaat catgcgacga tgaattagtc a 391

<210> 7910

<211> 447

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-D1

<400> 7910

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aacggggcgca tcgtggcccc gtccgggttc gggttggggc gcaaggcgaa gcctgctccg 180
aagaaggtgg cgaagacatc gacctcctct gaccggccgc tgtggttccc cggcgccgtg 240
gcgcccgaact acctggacgg ctgcgtggtc ggcgactacg ggttcgaccc gttcgggtctc 300
gggaagcccc tggagtacct gcagttcgag ttggactcgc tggaccagaa cctggccaag 360
aatgaggccg gcggcatcat cggcaaccgg ttcgagtcct ccgaagtcaa gtccaccccc 420
ttgcagccct acagcgaggt gttcggc 447

<210> 7911

<211> 464

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-D12

<400> 7911

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 agcccaagga gccgtacgtc ggcaggtgcc tcctcaacac caagatcacc ggcgacgatg 120
 cgccggggga gacgtggcac atggtcttca gcaccgaagg caagatcccg tacagagagg 180
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 ggctctactc catcgccagc agcgcgatcg gcgacttcgg cgactccaag acagtctcgc 300
 tgtgtgtcaa gaggtcattc tacaccaacg atgccggaga gatcgtcaaa ggagtctgct 360
 ccaacttctt atgtgatctt cagccaggtg ataacgtcca gataacagga ccagtccgca 420
 aagaaatgct gatgccc aaa gaccccaacg ctaccattat aatg 464

<210> 7912
 <211> 445
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-D3

 <400> 7912

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 gatggattta ctcagggccca acctagtcta caggcaaccc ggcagacaca aaagtacct 120
 atcttacagt cgaagtcgca tattaagcca tctgatcaat tgcaggcaag tttttcgcgt 180
 gaaaattctc catcattggt cagaccttcc atcgaacttg gagaagtctc tttaccocagt 240
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 aagagtgggt tcaaaccaaa taaccacagt gatgcacagg ctcttgggtcc aagtggacca 360
 cttccagtgg cttctttatc acttcaaaat gctgctggtg aaaataccac tttgcaggca 420
 catacaccaa acatttctcg tccaa 445

<210> 7913
 <211> 387
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-D6

 <400> 7913

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cactagcaac gacctaacac caatggctac caagatatta gccctccttg cgcttcttgc 120
 ccttttagtg agcgcaacaa atgcgttcat tattccacag tgctcacttg ctccatagtgc 180
 cagtattcca cagttectcc caccagttac ttcaatgggc ttogaacatc cagccgtgca 240
 agcctacagg ctacaactag cgcttgccgc gagcgcctta caacaaccaa ttgcccaatt 300
 gcaacaacaa tccttggcac atctaaccct acaaacatt gcaacgcaac aacaacaaca 360
 acagtttctg ccatcactga gccacct 387

<210> 7914
 <211> 460
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-D8
 <400> 7914

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 acaaagatga ggaggcgaag atgtgcatgc ctggtgaccg tatcaagatg gttgttcagc 180
 tcatccagcc tgttgcttgt gagcagggtg tgaggtttgc tatccgtgag ggtggtaaga 240
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 cgagaatttt ccttgtttac tcaaagcgaa atgctctgta gttgttatta tgtgttgagt 360
 tttaggggtt gttcatgtga aattgtagta tgacactctt tcgccaagtg aatttgcata 420
 atttatgaca ttcacgacaa agatacactt atctggttgc 460

<210> 7915
 <211> 431
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-010-Q1-E1-E10
 <400> 7915

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 gaggcaagt tttgctacct tgtacagatt ccaccaatcc agtgcttttg atgattcaaa 120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaaaaaaa gaaaaaaaaa aaaaaaaata aaaacaaaga aaaaacacaa aaacaaatag 240
 taaagaaaaa aaaaaagggg gggcacctaa aaaggtaaag cctaaattac ccttaaaagg 300
 aaaataaaaa cttttaaaaa ggggccacaa aattaaattc aagggccctt tttttaaaac 360
 ttcctgaagg aaaaaacccg ggggtttacc aatttaacc ccttaaaaaa aaaccctttt 420
 ttccaaaagg g 431

<210> 7916
 <211> 438
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-E11
 <400> 7916

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 aggatccctt acctgatttg aatttcatcc tcctttaaat aggatatgct ctaagtcttc 180
 ccatactttc ctataatgac tgcaacgatt ttctccattt tgcgaattcc tattttatatt 240
 gaagtatat actatcatat acattatcta aatcgatcca ctttaataaa aatagaaaaa 300
 atcgaaagaa aaaaaaaaaa gaaagagtaa ataataaaac aggatattct gtttcataat 360
 tctgaaatag agttcttttt tttagtatta ctctcatta ggatgtatat attaatac 420
 ctattttaat atatatta 438

<210> 7917
 <211> 381
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-E3
 <400> 7917

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ggtgcatctc ccaccgccgg tctatctgcc gccgccggtc tacctgccac cgccggtcca 240
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 gcctcagcct catccccagc cacacccatt cccgtgccaa cagccgcata caagcccatg 360
 cctgctgcag ggaacctgcg g 381

<210> 7918
 <211> 414
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-010-Q1-E1-E5

 <400> 7918

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 ctccactgag ggtgaggtga ttgatgcaag cgttgtgtat gaccttggga caaggggaatc 180
 acggggggtt ggttttggtt ccatggctgc tgttaaagat gcagatcgct gcatcaaata 240
 tctggaccgt tctgtgttgc aaggctgggt cataactgtt gagaagattt tgttgacagc 300
 aacagggtag atgttggtag ctgctctgca tcaaactgat acaacctaac accaaaccat 360
 gccaacctca gccaaatggc acagacaaga cgaggtanaa cccaacacc tggg 414

<210> 7919
 <211> 449
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-010-Q1-E1-E7

 <400> 7919

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 gtatttcatt gcgacaaggg tttagcccat ttttcaaccg ccaacttttg tggtagtttg 180
 aagttcagcc ttgaactatg aaatcgagta ccaaacgctc tccaactttc aaaactagac 240
 aaatttggcc atcttctctg ttccgaaggt ggttttcttt atttctaaaa ataataaaaa 300
 tctgctttaa tctctataaa ttcacaggta attgatttca aatcagaaaa atatgaagta 360

gtatcatttt ttctgaaaaa gttatctttg aggttgaaaa tgtactttac cctaattaag 420
catgacgctc tcaactgttgc attgccaat 449

<210> 7920
<211> 359
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-E8

<400> 7920

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cttccaagat ggcagcgcc catggccatg gccacgcaag cctccgcgc cacgcgccac 120
ctgctggccg cgcctgggc gccggcggca attccgcggc agctgagctc gcagctcgcg 180
ctgccgtcgt cgtcctcccg cgggcggcc ccgctccgc cgtccacctt tgaggcgggtg 240
gcggctctta aggggttcgt ggtccgcag gtggactcca tcacgctgtc cccgatcttc 300
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<210> 7921
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-E9

<400> 7921

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tggccaaccc catcaccaac cacgtccaga gcgcggagca gcacaaccag gacgtgaact 180
ccctcggcct cgtctccgc aggaagaccg ccgaggcggg ggacatcctc aagctcatgt 240
cgtccacgta catggctcg cgtgccagg ccgtggacct gcgccacctc gaggagaacc 300
tcaagagcgc cgtcaagagc tgcgtgatgg cgggtggccag gaaggtgctg accaccagcc 360
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gcg 423

<210> 7922
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-F1

<400> 7922

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gggccgaccc acgcgtccaa aaaatatccc caaacccctag ctcccgatct cgatggcgaa    60
ccctcgcgtc ttcttcaaaa tgaccgtcgg gggcgccccg gcggggccgga tcgtgatgga   120
gctgtacgcc aacgaggtgc ccaagaccgc ggagaacttc cgcgcgctgt gcacggggcga   180
gaagggcggtg ggcaagtccg ggaagccgct ccactacaag ggctccacct tccaccgcgt   240
catccccgag ttcatgtgcc agggcgggcga cttcaccgcg ggcaacggca ccggcgggcga   300
gtccatctac ggcgagaagt tccccgacga gaagttcgtg cgcaagcaca ccgcccccg   360
tttgctctcc atggccaacg ccggggcccaa caccaacggc tcccagttct tcatctgcac   420
cgtcgcg                                           427
  
```

<210> 7923
 <211> 448
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-F11

<400> 7923

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ggtcaggaat tcccggggccg acccacgcgt cagaacgcgg cgttccgcaa ggccgcccgc    60
ggcccgcgtc agggcatcct ggatgtctgc gacgtgccgc tcgtgtccgt cgacttcagg   120
tgctccgacg tgtcctgcac catcgacgcg tcgtcagca tggtcatggg cgacgacatg   180
gtcaaggtcg tcgcctggta cgacaacgag tgggggtaca gccaacgcgt ggttgatctg   240
gcgcacctgg tggcgggccaa gtggcccggc gccgcggcgg ccggcagcgg cgaccctctg   300
gaggacttct gcaaggacaa ccccgagacc gacgagtga aggtgtacga agcatgaggc   360
cagggttctt tccacgacga aacgtacagc acggggcgga gggttctttc catagagaat   420
tatatacaga ttattcgccc aaagagac                                           448
  
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<210> 7924
 <211> 438

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-F4
 <400> 7924

gggccgaccc acgcgtccac tctatcttta cctatggcgg tgagacgttt cgtggaacag 60
 gacaacacca agaaaccaat cttattagac gacctgacgg aactcacatc aaaaaacttt 120
 gatttggtta gatcaaatgt cgactcgggtg atcgatagag gtgcttgaaa tgggtcggggc 180
 cttgcaaagt gatggctccg aaattccagg agatgtctga gaagaacctg gatgttgtgt 240
 tcctgaagct cgactgcaac caggacaaca agccgcttgc gaaggagctg ggcataaagg 300
 ttgtgccaac gttcaagatc ctcaaggggtg ggaaggctgt gaaggaggtg accggcgcca 360
 agatcgacga gctagcgcaa gccatcgaca cagtcaagtc agactgacaa agaaagcaag 420
 tgatgcaact agctagtg 438

<210> 7925
 <211> 96
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-F5
 <400> 7925

aattcccggg ccgaccacg cgtccacgga cgcgtagggc tgtataaatg taattcctct 60
 gctttgcaca tggatggatt gggatgtaac ctgttc 96

<210> 7926
 <211> 458
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-010-Q1-E1-F6
 <400> 7926

aagtcgccgg tgcaccaca cgtcaaagaa tatattgagg cctgtgcttc caatgctgac 60
 tttgataagt gtctatcagt ggatgggtgat agccaaggct tagagcgact ccttggagct 120
 ctttctgcac atatgtggcc tggaatgatt ctgaaatctg gaaacagaat aactgtccca 180
 tccttggttg aaaaacaaga atccacagat gatgaatcca actatgattt tgagtacgag 240

gtcttgtctc atggatccga tgaccagtgg gaattttattg gagagacaag tacatccaga 300
agatttgaga gaccaaata gaacctgatgg gcacaggatc acacacatca agttgtgaat 360
gccggtactg actcttcagc atccaactct ccccgacta acacacccac agaaactgct 420
gaagagaata ctgtaactca gagcaacaaa accgacaa 458

<210> 7927
<211> 163
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-010-Q1-E1-F7
<400> 7927

aattcccggg ccgacccacg acgtcaaaaa aaaatagaag actgtaacat caaatgctga 60
ctttgaaaaa aaaaaaaggg ggggcgcccc aaagggttca agcttaagta ccccttcaag 120
ccacgtcaaa acccctccaa aatggcacct aaattcaatt caa 163

<210> 7928
<211> 439
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-010-Q1-E1-F8
<400> 7928

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gggcccggc eggcgatctg gcggggagga tatggccggc gggaaggagc cgatcgaggt 120
caggttccgg ctcttcgacg gcacggacat cgggccacc aagtagatc cctccaccac 180
gggtctctcg ctcaaggagt tcatcctcgc tcggtggccg caagataagg atataactcc 240
aaaaactgtt aatgacttga agcttatcaa tgctggaagg atattggaga ataatcggac 300
acttgacagag tcccggtgtc cagtaggaga ggtcccagga ggtgtaatta caatgcaggt 360
ggtagtgca cctccacaag ctgacaaaaa cagtgaag cagcttgca attccgtcaa 420
gcagaacaga tgcgggtgc 439

<210> 7929
<211> 386

<212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-F9

<400> 7929

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attccccgggc cgacccacgc gtccaccac gcgtccggta caaatcatga attgtccaca    60
atagaataac caattgtgac catagcaaaa atcttctgtt tctgaataaa aatagcaaaa    120
tcgggtgctgt gttcgtaaaa gcaagggcaa gggtagaaaag agaaatatga aaatatactg    180
gtgggtgggt ctgtttgaga ctaaatcgta gacaatggtc tatttcagac ttaattaaaa    240
gtttaatggc acttttgcaa ccttaagaag tttagtggca tatatcaaaa catagaaaat    300
tataatggca cagacacaat taacctaatc ataaaacagc atgtcatctc tcaaatacacc    360
aggagaaaagg gataaaggga acctgc                                     386
  
```

<210> 7930
 <211> 456
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-G11

<400> 7930

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ggtaaagggtc aggaattccc gggccgaccc acgcgtcagg gcagacaaga agaagatcaa    60
ggctgccgtc aagaagatgt atgacatcca ggcaaagaag gtcaaacacct tgatcaggcc    120
tgatgggaag aagaaggctt acgtgaagct gactcccgac tatgatgctc ttgatgtggc    180
caacaaaatc ggcatcatct aagtgtgca ttaggcatcc tagttcatct gttgtgtcct    240
agttctatgt gaaaccagag ttttgtagct atggctctca atcgttccat taccatgtgt    300
tatgcacact tctgaatttg atatcatcca agtgaccttt tgaactagtt tgcgttctgc    360
acttcattac acttgacac cgtcagtctt tgtgaccagt aattttgttt gtcgtaatgg    420
gttggttttg caactcgacc aaatagctgt tttgag                                     456
  
```

<210> 7931
 <211> 426
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-G12

<400> 7931

tccccgggccg acccacgcgt caggggagga tgacaatcat gtttacatga ctggtcctgc 60
agaggccgtc ttttatggat ctgttgttca ctatgtactg gggagtgggg accaagatag 120
aagggttggc tgccactcaa agcttgtgag attggttaca atatccatga aactgaatgt 180
tctggtgccg gtacactcgt ttagatattt taaattatgg ttgcttgatt tgggtagcag 240
tagaggcttc cttttgaagc attctagtgt tgtccacctt ttgtactcct ttactctgtc 300
aggtttgaac tacattgtta gcatgtcttt ccaaccattt tctgtttctt ttctttgcaa 360
gttaacgtca atgcagcttc agtattgttt tctaaaaaaa aggttggttt tgcaactcga 420
ccaaat 426

<210> 7932

<211> 240

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-G4

<400> 7932

ccaaaagggt caaacctaac ttacccttga atgcaaattc aaacccttc aaaagtgtca 60
ccaaaattaa tttcatgggc cgtcttttaa caacgtcgta acgggaaaaa ccctgggttt 120
accaaattta accccttga aaaaaatccc ctttcacaa actgggttaa taccaaaaag 180
gccccaacgg atcccccttc caaaaaattg cccaccctaa atggtaaatt gaaccccccc 240

<210> 7933

<211> 383

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-G5

<400> 7933

accacgacg tcaacgcaga ggcacaagat cgaggccggc gtggcaacgg cggcggcgct 60
gggcgcgggc ggctacgct accacgagca ccgcgagcag aaggacgcc actacgatag 120
caagcaacaa gagcaaaagg ttgccacgg gcaatggcaa gggcaacggt actcctaata 180
atggcaactga aaccactggt tatcccatcc attcaaatat gcattccaaa ccccataaat 240

ataccggccc taaccccgtt cacgttcgtt cctttaagtt aataagagca aacgtcctca 300
cctgtgtgtt gctccattac aaatccaacc atttacctat taacgtctgc aaataacgac 360
taagcgcaag cttctgcaac gtg 383

<210> 7934
<211> 437
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-010-Q1-E1-G6
<400> 7934

cccgggccga cccacacgtc caccacgcg tccgcccacg cgtccgcgat ctctttgatc 60
gcctgagcca tgcattgcat ggtccagttc ttgatctttg tgtgtctgtg cgtgtgcata 120
gacgtgtggc tgcagcacga gaagcacaag gccaaagaagg acccagagaa cgagcacggg 180
caccgggtca aggaggaggt ggccgcccgc gccgccgtgg gtcgcccggt ctctgctttt 240
caagaacaac aacaaaaaaaa aggaccccaa gaaccacgcc aacaactgat ccgtcccggt 300
tgcgggttcaa ccggtccttc aagcctcgtc ttcgtcaacg gtgtgccggc aaggccttga 360
tttgggctac cgatatttgc atggacgtag gaactgtgtt ggtcgggtcct cggcggttctt 420
gtatcaagat caaatca 437

<210> 7935
<211> 468
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-010-Q1-E1-G7
<400> 7935

gtactagtca ggaattcccg ggccgaccca cgcgtccacc cacgcgtccg cccacgcgtc 60
cgcccacgcg tccgcccacg cgtccgacga cacaaacaca atcatggccg acattgactc 120
acgaccgcgc aaatcgggtc cattcgccga gggcgagacc attgtcgact ccaacggcga 180
ggtcacccag gccgtctcgg agaccgaaaa ggacaccacc gccgaatcac actcaaagcc 240
tgacgccgcc gtcgacgagg ccaccgacga ctttgaggct ctgcgctca gctcgaagaa 300
aaagaagaag tcgaagactg aggatggcga ggtcgacctg agtgcgtca agaagaagaa 360

gaaaaagccc aaggcgccgc tcgtcgacga ctctgagggc aagcttgcgg ctgcatgtgg 420
cgacgaggag aatgtgctgg ccgacgatgc ggctgagaag cagtccgc 468

<210> 7936
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-G8

<400> 7936

ccgggcccac ccacacgtcc gccacgcgt ccgtgaagaa aatgttaaata aatgcgccag 60
agtatttgca gaatgttggt gagctatgcc aaaacagagt ggttgctctc gataacgtga 120
ctgaagaccg aaggctccaa ggcagcaac ttgacaaatt gctcgatgta gtggattcag 180
tttgtgcaaa aaatggagga aaaccatttt cagatcaaat gttcactagc atcaaggagg 240
tgcatgatag agaaaaagag gtgcatacct cgggatattc agatgagcag atatctgaat 300
tgaaaaagga gattcataga actagggatg aacagcttgc gcacaataac aacatggctg 360
aggaaaagtt aaactgcact gtggagaagt tgcaacagca gctcatggaa gaacaga 417

<210> 7937
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-H1

<400> 7937

acgcgtccag gctaggcaga acaccaagga ctgcgagcac ctagcccgcc gcgtcgccat 60
gctcgcgag ctggtcccc accctgcagga cccggaggcc aggcgggagg tggccgggct 120
caaagatgag ctctgtggagg ctcaccagct catcacatcc tgccagagga gggggctcac 180
gtcccagctg ttctcggcgt ccaggcaggc cgacaggttc agggacgtcg agcgcaagat 240
cgaaacctgc gtgtccatca tccctgtcat cggctacatc ggcataacaa gacgcctcga 300
tggttcgcaa tccagctccc agctgtcggc gggaggggct gaggatcggg agttcacgct 360
ggcggagatc gccgtggcca ccaacaactt cgccgtcgtg ctcagcaacg acgccgacac 420
tggcac 426

<210> 7938
 <211> 434
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-H10

<400> 7938

gaccacgcg tccaccacg cgtccgctga catctcgtcc cgtcctttcg tttcgaagcc 60
 tcgcgagccc cgacgatggc caccgccgcg gtgtcggtcg acgagaagct cgacaagctt 120
 cgcgccgagg tcgccaagct cgaccagatc agcgagaacg agaagtccgg gttcatcagc 180
 ctctgtgtcac gctacctcag tggggaagcg gagcagatcg agtggagcaa gatccagacc 240
 cctacggatg aggtggtggt gccctacgat accgtcgcgt cgctcccga agatctcgag 300
 gagacgaaga agctgctgga taagctcggt gtgtcaagc ttaacggagg gtcggggacg 360
 accatgggct gcaactgggc caagtctgtc attgaagtcc gcaatggggt cacattcctt 420
 gaccttattg tgat 434

<210> 7939
 <211> 438
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-010-Q1-E1-H9

<400> 7939

attccccggc tgaccacgc gtcaacggac gcgtgggatc cacacaagca cttcgacgtc 60
 acacggggcg tcgacacaga cacaccaagc gtcggcacca atggcttact accaggaggt 120
 ggactactgc tcggaggagg tgaggtcggt ggccccggcc ggcttcggcc gccacggcgg 180
 cggcgctccag cagcacgtcg tcaaggagaa gttcgaggag gtcgacacgg tctcacgcgc 240
 cggcgccaac caccaccacc accatgggtc ccacggcggc cacggcttcg tgggtgcgcga 300
 gaccagggtc gaagaggaca tcaacacctg caccggcgag gtccacgagc gcaggagag 360
 cttcctcgcc agggctaact gagccgcccg gcggccggca tccacgcccg ttcgtgcttg 420
 cctgcgtgcc ttatgtat 438

<210> 7940
 <211> 423
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-011-Q1-E1-A10

<400> 7940

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catggtatgg gagactacgg cccgtatacc tttgaaccct cgtaggaagt cttgagaacc 120
cttgcattgca ttcgctgttg tatgcgtgcc atgctgttga atttagctgt actacaccag 180
atagtgtatc ccgaactcac ggagtttaat ggaaccggat agaaagctgc ccatgtagtt 240
tggtgtttgt tgcttacgtt gtggatttta ctgtagtac ttgtctaata ctccgtttct 300
ccgtttgggt atcgaccata ttggagggca tggaattaaa ataagttcaa taccaaatca 360
aatatagtat tgaaatgaga tgtaatttca attctattgt ttggatgtcg ctgatttgga 420
att 423
```

<210> 7941
 <211> 433
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-A12

<400> 7941

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cccacgcctc cggaagtta aaagcaagag acagctaacc cagtacctga aagctcatcc 60
tggaaggccct gcatcctcag agttcgattg gggaaccagt gatactccca gacgctcagc 120
acgcttgagc gagaaggcca aggcaactga gagcccagag ggtgagaaga cccctaaacg 180
gggaagatca agttctaaga gaggcaaaaa ggaggaaaaa gaagacacag aggctgcaaa 240
tgaggctgga gaagatggtg cttcggagga aggtaaaggc acagatgtgg agatgaaaga 300
tgctgaaaac gctgaagacg agaagaaaga ggtcccaaat gcagatgctg cagagaagac 360
tgaggaaggt gaagataaga aagaggaggg ccctgctgta gatgcagcag agaagactga 420
ggaagggttaa gat 433
```

<210> 7942

<211> 235
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-A2

 <400> 7942

 ccggccggtc ctaattaccg ggtagagcca cgcgtccgat taacatcaaa ctgctcgtcc 60
 acgcctcctc ggcaagggtg cgtacggcgt ggcctaagg ttcattctgc cgcctccctc 120
 aaactcttga ttccgctcc ctcaacctct tgattccgcc tccctgaagg cataccagcg 180
 ggatcaagct attttgctgg ccaaccgaac ggtcaagccg acgatgacgc tcgga 235

<210> 7943
 <211> 372
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-A3

 <400> 7943

 acgcgtacaa gagtgggcaa ccctgggaaa aatgaacatc agaatatattt tcaatcatat 60
 ccaattgact tggggcagaa ataaccgaac tagagtctac agtgagggtga gacctgttcg 120
 cctcttgagt gactgaaaca aataagagat tgtagagct cggacaatac cattgagtgt 180
 acaggtttgt tcaggacca ctggctataa gctactctat tcgttcacaa agactgtatt 240
 gtagaggtag atgatagaat ttattcttat atgctataaa agaaaatgtc ttggctacga 300
 tgctggctga ttgcaaagt atcttctctg atcgacttcc atatcaaacy agacaaaccc 360
 gagggggcgt cc 372

<210> 7944
 <211> 75
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-011-Q1-E1-B12

 <400> 7944

 ccccaaaagg atcaaacctt acttaccctt gaatgcaact tcaaaccct tcaaaattgt 60
 caccaaaatt aaatt 75

<210> 7945
 <211> 330
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-B2

<400> 7945

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ttttggcttt aaaacggtag actaaattcc gaaattacca accagacctc gaatgtgcag   60
atcaattcta cctgtcctga aaacctatth ggatgcaagg ccacacagaa ttttacagac  120
aaactgtgaa cagctggacc aaagggcaca cattttttctc actgttttaa tgacatatgc  180
acaaatagtg aactccgaga gttcactaac ggccgcaggt cactaaaatt tgcttcatt  240
aacgaaaggt ttgaacaaag aacagcggaa ctggctatat gggcacaatg ctatggtagt  300
acagctatca gcagcaacgg cagcaaatga                                     330
  
```

<210> 7946
 <211> 303
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-B6

<400> 7946

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aaacattgac ccaagtactt agaacactga cgacaccggt acatcacagg cacacatcgc   60
ctgcttgtcc ttattacagg cacgagcatc acgttgctac tatcacaacc agtcctgatg  120
cacgccatgc ctgatacgac tgtattatag tagaaccagt attaaacggg tattagcaca  180
gccacacact gctatcaagc accactacta gtagtataat attgtagtga tacaagcagg  240
gagcccagcc cagccgagca cgagcagggt gcctgccact gccaggctct cccgccgccc  300
ttt                                                         303
  
```

<210> 7947
 <211> 426
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-011-Q1-E1-C10

<400> 7947

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 tggatttaac ttactttcta ttcatgtta tgcagtcctt ggaactttgg gacataaggg 120
 agaagaacac catgaccttc aacaatgcgc atgacggttt ggttgcagcc ctggcatcat 180
 ccagtgtctac aggggaagggt gcctcagtaa gccatgatag aactctcaag ctctggaaat 240
 gactttataa tagcgatcgg cgtgaaaacg attttctacc aaaaatgacc acatgacgca 300
 catgacgaaa aggtagctga caagatactc tggagccgcg tgggctcaag aactaacggt 360
 ggtttgtgtt gtggttcttg tatgctgttc aatatgctat tgaagtttgt aactcctaata 420
 agaaac 426

<210> 7948
 <211> 150
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-011-Q1-E1-C12
 <400> 7948

ggaggtagct gcggtaaacc taaaaacatt cataaggctc aaaatggtaa aatttcgctc 60
 gcaaatataa atacaaatgc taaaacctgc tgagacaaaa ataaaaaaaa aaaaaaaaaa 120
 aaaaaacaaa aaaaaaaaaa aaatttaaga 150

<210> 7949
 <211> 418
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-011-Q1-E1-C3
 <400> 7949

gggtcgagcc acgcgtccgc ccacacttcg gcgtaaatta aaagtatccc ataatgaaca 60
 gataccacca acatagttaa agtttttacc gggattaaag cggccatttt tcaaaacggg 120
 gtcgggtgct gaaaaaactc aaattgtttt ggggtccac gtcggtgac gtcagtttgg 180
 tctgggcaag cgcaggacga taccgatccg gccggtcagg gcgcacgcgg gggcgatccg 240
 atccagcgag tctaagggtta tccgcaaccg ttattcctaa atttttctcc ctatatcact 300
 ttttccccct attttcccc tatttttcat ctctcgcagc ggttccccct aaatactccc 360

cttatacccc actaccacta taaaatatca ttttctaata caactatcaa tttttttt 418

<210> 7950

<211> 275

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-C8

<400> 7950

tccgggtcga cccacgcac caccgactct tccgcccacg cgtcctcgga cgcgtgggcg 60
caaccaaacy cgcacgatat gagtccaaat cgacgaactc gatatgtcac caatactggg 120
cagcatgaag tcgagcgtcc tcaggctcaa gcaactccga gaagttccgc atgccaccgc 180
ctcctcatgg acggagaatc gtgtgcatct gggaggctcg gaaggttgcc cctccgctct 240
gctcagcatg ccggccgtct tcgacttcac ggcca 275

<210> 7951

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-D1

<400> 7951

gggtcgagcc acgcgtccga ggacacgtgg gctatagcaa ccggtccagc actttcacgc 60
tcagctccag caatggctgc ctccaccatg gcgatctcct ccacggcgat ggccggcacc 120
cccatcaagg tgggctcctt cggcgaaggc cgcatacca tgcgcaagac cgtgggcaag 180
cccaagggtg cggcgtccgg cagcccctgg tacggccccg accgcgtcaa gtacctcggc 240
cccttctccg gcgagcccc gagctacctc accggcgagt tccccggcga ctacggctgg 300
gacaccgccg ggctgtccgc cgaccccgag accttcgcca agaaccgcga gctggaggtg 360
atccactccc gctgggcat gctcggcgcg ctcggtgccc tcttccc 407

<210> 7952

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-D10

<400> 7952

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cacctgactc catcaccgtg cctgtctgtg ttctaggac aagaagagca gagatataca 120
ggagcgagca gagggcggga gaagaggatg agcaccacaa cggcgtcgtc gctgaacccc 180
aacgcgccgc ttttcatccc ggcggtgtac cggcaggtgg aggacttctc gcccagtggt 240
tgggagctcg tcaacaccac cgcttggttc cgggaccact gcttccggca gcgccagctc 300
cacgaggccg cctgcgacga cgtcgccgcg ctctccccc acgacctctc cgacaccaac 360
gaccttttct acgcgcccga cgtcgtccac caccaaccag cgacggcgct gctgcccggg 420
tacgatgtcc t 431

<210> 7953

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-D3

<400> 7953

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taaggaaaat ttttgaaaag gtttgaaata tatcttcac agttgacacc aaatgccatt 120
gtcaggctga gtgtctacat atgggctctc cgaagctagg gcaaagatgc taatgcccaa 180
ggtttctgtt gattgcatga attgcactac cagacgaagg ctagagctga tggccttcac 240
aagaactttg gatgttataa ttttgcatc cgaaaggaca ccagggttc ggtgatcggc 300
taccgcacta agtggccgac cgggtggaca aacgaatggt tctacgtgaa agccgatgag 360
aagaagaggg aaaaactcat cactatggtt atgagtcctc tg 402

<210> 7954

<211> 74

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-D7

<400> 7954

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ttttttttta ctat

74

<210> 7955
<211> 218
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-E12

<400> 7955

acggtcgtaa attccccgat cgaccaacgc ttcggacaag ccttcggcca aggcttcggc 60
caagccttcg gccaaagccgt ccgcaaggat aaaattctca cagatggggg attgattaga 120
gagatgatgg aagattctct tcttaacaag tatagtgtaa ttatgggtga tgaagctcaa 180
gaaaggtcca tctcaaccga catgttgctg ggtccccc 218

<210> 7956
<211> 391
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-011-Q1-E1-E7

<400> 7956

caagaatact gagattgcaa agcacttgct ccttcacca gtaaagctcc attgcagcat 60
gcttgcgag gatgccatta aagctgctgt gaaagactac gaagccaaga aggcgaagat 120
ggggcaaaag agtgaagaca gtccatcaga gaaagctgct gaagcatgaa agtttctgcc 180
ttttttaagt gtaattgagc tgatatgttt ctcagtccat gactccccgc tgcttcagat 240
aaatgcttct gattgcgagg cgaggcgagg gaccgcgtgt aatgttcaca aattctggta 300
gtgcggcatg tgccttaact cttttgagga tgggtgacaac caatttcaaa taaatttggt 360
gccatcttag aattaanaaa naannannna a 391

<210> 7957
<211> 397
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-F3

<400> 7957

ccgggtcgag ccacgcgtcc ggttttcttg ggcaatgatg ttaagttccg gaatgttttc 60
ccttccccctt tttcctaata gctgggtccaa gtgtaaaatg ccaaaaggaa tccttaacca 120
agccccgggc ggttctgttc tgggggccaa aaaacaaccg aatggggaaa aaccggaaat 180
aagagcgtgc cgctgtgtgt ttcctttgaa ggaatgaaaa tgggtgttcgt gttgtgcatt 240
gcttattaaa aaaaaaaaaa aaaataaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
aaaaaaaaaa aaaaaataaa aattaataaa aattaataaa aaattaaaat aatataaaaa 360
taatttaaaa aaattaaaaa aaaaaaaggg gggcccc 397

<210> 7958

<211> 225

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-G1

<400> 7958

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ggcgaatgct gtaaccacgc agcctgaatc cctgtcaatt tgtacacacg cccaacattt 120
ggagatcatg tttcccctgg aattgccgtc acaccctatc caagtcaaac gtaaagacag 180
accatccact gaactcccgg aaacaagggg cccacatcaa catgt 225

<210> 7959

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-G3

<400> 7959

gggtcgagcc acgcgtccgc caaaccttcg cccaagcctc cgatttggaa agattcctaa 60
gacaacttca cggacattaa aggaattcca aactggtaat ccggaagatg atgctcctaa 120
agggatatca accatcaaca tcaagcttgt atatgacgat taacctgaaa aggtcaaggg 180
aaaagagcaa aagggcgcta agaagcgcca acgcttgggt gaaaattttt caaatctttt 240
ggattccatc aaggaaatat cagcttcttc aacatgggat gattctaaac agcttttctga 300

ggatagccaa gagttcaggg ccttggacaa tgagacttat gctagagagc tttttgaaga 360
gtgcgttgtc cacctgaaag aaagggttaa agagaaagaa c 401

<210> 7960
<211> 337
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-G6

<400> 7960

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cgatcatggc ggtggatcag cgctagctca gtcctogaat ccggtcttct tccagacggc 120
gtcccgacc cggtgaggt cgcgcccctt gagcgtcctg ccgatccct cgtgcaccga 180
cagcgacgcc gcccggtgc gccacgccag ctcgtcgggc ggcaccatct ccgccccgcc 240
gcgcgcccctg ccgtagctgc tgccgtcgtc gtcgtcgtcg tcgtccgcgc caggctccca 300
ctcgcccgcg cgggtggtggt cccggtactc caccgccg 337

<210> 7961
<211> 466
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-G8

<400> 7961

aattcccggg ccgacccacg cgtccacaaa ccatctcgac tcgtggggaa gattcgtctt 60
cgccggcgtc gacggcctag ggttcgagga acgtccgtcc gtccgtccgg tgaaggagcg 120
gtagggagggc ggagatgac gaggtggtgc tcaacgaccg cctggggaag aagggtgcggg 180
tcaagtgcaa cgaggacgac accatcggcg acctcaagaa gctggtggcg gcgcagacgg 240
ggacgcgccc cgagaagatc cgcattcaga agtggtacaa catctacaag gaccacatca 300
ccctcaagga ctacgaggtc cagcagggca tgggcctcga gctctactac aactgagccg 360
ccgccccctt ctccctctcg tcagggtggt ctgaattctg aagtcattgg tgcaattcgc 420
ttcgcggtga tctcttaagc tcatcacata tataaaagca acctca 466

<210> 7962

<211> 464
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-G9

<400> 7962

ggagccaccc acgcgtccga ttctctcca tctcttctt ttccctttcc tttttctcat 60
tgcgacgcct gcctgggcca ccgtcgccgc tctacacaag gtgcccaggt cttcgccggc 120
gccgagcagc caccagccgc tgtgcaacaa atcacgtctg tcgagggcat ggatccctac 180
atgacaaggc tcggcgccgg agccactcac cagctttcca gggctgaagc aatgcctgac 240
cgaagggtcta ggttttggca gacagatgtg cagcttgccc ctccgataga catcatctgc 300
cctctgcctc gccgcccttc tcgcctaccg gttctcaata gcccgaagct caatggggca 360
ctcccactgt atagagcaga cccactttt gatatcggtg acctcatcct tagcaagaat 420
gaccctgatg tggatactga ttcaagcaac caagcgggct tttt 464

<210> 7963
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-H1

<400> 7963

ggtcgagcca cgcgtccgat aaaagtcaat taggaaggct ggtcctagca ctaaattggc 60
aacaaaagaa aacgaattta tcgaggcaga tcctctgcga cttgatggc tcattgcaat 120
tatgagtaca tatatatatgc ctttatctta tgcttagtag aacaaactga gcatatcata 180
tatcatctat ttgttttttt tctcttaaca tacctctggt cacattccat acttttactc 240
cttatatatt gcatagttat atgtaataata taaatatgca atatataact ttattaattc 300
ctacctatgc ttatcaacag gttgccctgt gaactttgag ttccaaaact acacaatcat 360
cacaagcaag tgcaaaggac cgaagtttcc agccagccaa tgctgtgccg cactcaag 418

<210> 7964
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-H5

<400> 7964

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tacgacatgc caacgggttaa acaacttatt aaaaatgcaa gacagccaat acgaaatgct 120
acaaaatcgg ccgcgcttaa gggatgtcct cagcgtcgag gaacatgtgc taggggtgtat 180
actatcaacc ccaagaaacc caactctgcc ttacgtaaag ttgccagagt acgattaacc 240
tctggatttg aaatcactgc ttatatacct ggtattggcc ataatttaca agaacattct 300
gtagtattag taagaggagg aagggttaag gatttaccgc gtgtgagata tcgcattatt 360
cgaagacacc tagatgctgt cgcagtaaag aatcgtcaac aagggcgctt taaatatggg 420
gccaaaaagc caa 433

<210> 7965

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-011-Q1-E1-H9

<400> 7965

acccacgcct ccgcaagcac tccacactgc tgtgcagaac gagagccaca ccatcagtag 60
ttagagcgac caatagatga gttcctcccc gtcctttggt ctctggctg tagcagcatt 120
actcctagca ctgagcttag cacaacatgg ctccctcgcc gcaaccgtcg gccccagggt 180
catcgctgctc ggcgccggca tgtctgggat ctcggcggcg aagaggctgt cggaggccgg 240
gataaccgac ctgctgattc tggaagcgac ggaccacatc ggcgggcgga tgcacaagac 300
gaacttcgcc ggcatcaacg tcgagttagg cgccaactgg gtggagggcg tgaacggcgg 360
caagatgaac cccatctggc ccatcgtaa ctccaccctc aagctccgca acttccgct 419

<210> 7966

<211> 292

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-A1

<400> 7966

acggtccgta cattccgggg tcacccacgc gtccggagga atcgcaaaga gggccgtctc 60
atccgagtta aggaagccat ggagcacaag gaggctgggt gccaggcccc cgagggaccc 120
atcctctgca tcaataactg tggcttcttc ggcagcgcg cgaccatgaa catgtgctcc 180
aagtgccaca aggagatgat aacgaagcag gatcaggcca agctggctgc ctctctatc 240
gacagcatcg tgaacggcag cgacgccgtc atggagccgg ttgttgctgg ca 292

<210> 7967

<211> 376

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-A2

<400> 7967

cccacgcgcc cggagccact gtcaagtgcg cgcgtcaagc ttgcttagct agccgccatg 60
gcctccctcg ccgccgtctc cgtgaagccc gtggccatca agggctctcg cggcagctcc 120
atctccggaa ggaagctcgc cgtcgccagg ccgtcgcccc gctccatccg caggccccgc 180
gcagccgccg tgggtggccaa gtacggcgac aagagcgtct actttgacct cgacgacatc 240
ggcaacacca ccggacagtg ggacctctac ggctctgacg cggccgcgcc ctacaacccg 300
gctacagagc aagttcttcg agacgttcgc ggctccgttt cacaagagag gtctgctgct 360
caagttcctg ctgctg 376

<210> 7968

<211> 280

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-A6

<400> 7968

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atctttggtg cagtcattgg tcgaaaccat cagggtagag cagctgcagc aactcgtgct 120
agctgtgatc acccacgtag cactggcaca cttttctccc tactctcagc gacaacaatt 180
tcttcaagtc aagcacatgt ccacttttag ccgtgtctgc gtacttgcag catcacttat 240
gaccatacaa ccagctaact actgcctaact cttagcaaca 280

<210> 7969
 <211> 426
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-012-Q1-E1-A7

 <400> 7969

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cggtcccaca ttcccgggtc canacacgcy tccgaccacg cgtccgcgcc gacaaccgag   60
gtttcgacgt tcctgcacgc gtgcgagggg gaggcggtga cgaagctcac caacgagaag  120
gtggcctact tcaacgcgcc catctatctg cagaacaaga ccagatcgg caagggtgac  180
gagatcttcg gccccatcaa cgaatcctgc accaccgcgg ccgaaaaaac aagctcaaac  240
cttaaccacc gacgatgcca gcacgatggc ccgctacgac cccgccatca ctatcttctc  300
cgccgacggc cacggcggcg angtggagta cgctcttgag gccatccgcg gcacgaacac  360
cgttgtcctc cgcgtcgaga agaagtcac acccaagctc gatgactcca ggcgcatagc  420
tatgtt                                         426
  
```

<210> 7970
 <211> 463
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-B2

 <400> 70

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ccggatccac ccacgcgtcc gcacacgcgt cagcccacgc ttccgcactg ccaccgccgc   60
cttggccggt gccgcaaccg tcctgcttgc cggcggcgcc gccatggccc aggaggtgct  120
gctgggcgca ggcgacggcg ggctcgtctt cgagcccagc cagttcacgc tcaaggccgg  180
cgacaccatc accttcaaga acaacgcggg cttcccgcac aacgtcgtgt tcgacgaaga  240
cgaggtgccg agcggcgctc acgcctccaa gatctcgag gaggagtacc tcaacgcgcc  300
aggcgagaac ctagtccgtc accctcaccg tgccgggcac ctacggcttc tactgcgagc  360
cgcaccaagg agcaggaatg gtcggcaaga tcacagtcaa ctaaagctag ctatcgattc  420
catgcatctc gatctgtatg taccocgccc gtccatggat gat                         463
  
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<210> 7971
 <211> 291
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-B5

 <400> 7971

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 cactttcacg ctcagctcca gcaatggctg cctccaccat ggcgatctcc tccacggcga 120
 tggccggcac ccccatcaag gtgggctcct tcggcaaggg ccgcatcatc atgcgcaaga 180
 ccgtgggcaa gaccaaggtg gccgccttcg gcagcccctg gtacggcccc gaccgcgtca 240
 agtacctcgg ccccttctcc ggcgagcccc cgagctacct caccggcgag t 291

<210> 7972
 <211> 286
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-B7

 <400> 7972

 tccccgggtcc acacacgcgt ccgataaagc gtacgcacgc actcgccctcc gacagcgaac 60
 gcgcaacgtc cttctcccg cccgcccggc cggccgggtcc ctgttccctc tccctccctc 120
 ggagcagcag gaccaggagc aatcgcgctc gtccctctgcg ctgcgcggcc cgcgggctg 180
 accaagcata gcttatcggc cggagctgga tgaccgaacg atgcatcatg acctcagaaa 240
 ctcagataga ataaaccgg aacaagccca tccagtgatg tccgcg 286

<210> 7973
 <211> 133
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-012-Q1-E1-C11

 <400> 7973

 gatgcccccc ggcgggcgccg gtagcgcttc ttcattggact cgaccttggt cttgcactgg 60
 ttggaggtct tggcgctgct acagatgcct ccagaggcct tcccttcggg agctctatag 120
 tatccatgct tac 133

<210> 7974
 <211> 353
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-012-Q1-E1-D4

<400> 7974

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cccacgcgtc cgcaaggagt aaggtggccg acgaggactt ggaggaggtg gacaaggcct 60
gggaccggcc cagcaggaga aagagcacag aattcgatat agccaagagc atcgagctgc 120
tggctagctc gttcttgaag attgagcacg ccaggatgga gatgtacagg gagacagaaa 180
ggatgagggt tgaagctgag attaagaagg gggagatgga gctcaagaga actgagatca 240
tggcgaaaac gcaccttcag atcgctaggc tttntgcaaa gaaattgaga cagagcagtg 300
gaaagaaagg tgtcagttcg tcagtaacag ctgaagtgga caccottacc aag 353
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<210> 7975
 <211> 417
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-E4

<400> 7975

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cccacgcgtc cgcacacgct gccacgcacc cacggtccgc ggaccgcgac ccacccgacc 60
cgcgatcgcc atcgctcac gcactcgcat cctcccgga caccataaa accaccgga 120
cgggcagggc gacgggtcct ccgcttcgcc tacggcatat tccccgagg ccccgaaacca 180
aaccaaacca aaccagccca gatcagcgaa acacactccg ctctcccgag accggacaca 240
tggcgggcggc ggcggtgacg tccaacggcg gcgcagtggc cgcaaatgga ccggcgcccg 300
gccggctggg ctccgtgtac agcgaggtgc agacgaaccg gtcctgcac gccctttccc 360
ctccccctcg tctcgcgtc caacttcccc gtcgtcgacg gccccgccag ctccgcc 417
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<210> 7976
 <211> 409
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-012-Q1-E1-F3

<400> 7976

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gtcgacaaac cacctccctc ccccgctctct cgtcgtctcg gaaggaacgg ccgcccgtcg 120
cgccaaggat tcaaggggtg gggagctgag ttgggaggag gactgctgct gcagccatga 180
aggccctcat tctcgtcgga ggcttcggca ctgcctcg cccgctcacg ctgagcgctn 240
ccaagccgct cgtggatttc ggcaacaagc ccatgatcct gcaccatata gaggctctga 300
aggaagttgg tggtacagag gttgtcctgg ccatcaattt acagcctgag gtcattgctca 360
actttctcaa ggacttcgag agcaagcttg gcatcaagat tcactgctc 409

<210> 7977
<211> 334
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-F8

<400> 7977

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gagttaaagt ggacgactca gagctgcgaa ctctggatg gaaattcaat cactatgaga 120
tgaaaggggt tcctgtaaga atatagatag gtccacgtga tgtcacaaat aagagtgttg 180
tggtttctag gcgtgatgtc cctggaaagc aaggaaagga gtttggagtg tctatggagc 240
cttcgatatt ggtgaaccat ataatgggtc gtctagatga catacaagca tgccttttac 300
agaaggcctt aaaatccgtg atagtaacat tgctc 334

<210> 7978
<211> 330
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-012-Q1-E1-G2

<400> 7978

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agtacgggca gacgtggcgc gccacgacca agggcgacgt gtacagctac ggcgtgctgc 120
 tgatggagct cgccacgggc cggcgcgccg tggacggcgc cgaggacgag tgccctggtgg 180
 agtgggcccg gcggatggcc agagaagggg ggagttcggc gggcgccgtc gtcggcaccg 240
 tgtcctgnga gtcctgatg ctcggcatgc ggtgcacggc ggacgcgccg caggagcgcc 300
 ccgacatgcc ggacgtgctc gccgcgctgc 330

<210> 7979

<211> 390

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-012-Q1-E1-G3

<400> 7979

acccacgcgt ccgaacacct cgcttcacta gaggaataat cctagcagct tcggttgccc 60
 tcaaaattgt ccggaaaaag gatttgaagc attgtgagag ggccctgaga cgatggcgaa 120
 cctgttcctc aagcaggcaa agcagtacgt ggcgacgcgg ccggtctacc cgccggagct 180
 cttcgacttc atcgctccca agaccctcg ccgcgacatg gcctgngatg tcggcaccgg 240
 caacggccag gccgcagcgt cggtcagtcg accatgcac ctcgctctcg cctacacgga 300
 acgctgcaga cgcactgtcc gtgcattatc tttataaagt gaaggctggc tgggtgaact 360
 ttcattcaac ttgcagctgg cgaaactgta 390

<210> 7980

<211> 288

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-G8

<400> 7980

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 agagagagaa acaatcaggg gtccatccat tttgtcagc catgacgaac ggctatctgt 120
 tccgcgagta catcggcgcg cagtcaccg gcgtccagtt ctccgacgtg cccatcaacg 180
 ccttcgttag cttccacttc atcctctcct tcgccatcga ctacacgccc gtggggcagc 240
 agccgaagcc ggtgccgacc aacgggggtgt tcagcccgtt ctgggaca 288

<210> 7981
<211> 175
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-H7

<400> 7981

aaatatatat atatatatat agcagtagta taacatagcg tatgttttta gcgggggggat 60
cagtagtaca cgtttgatgt gaatgatgta ctcaactgaa agagagattg cacggcggaac 120
ctttgcgtct gttcttggcc ggacaggata attttcgatt ttctcgaccc aaaaa 175

<210> 7982
<211> 118
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-012-Q1-E1-H9

<400> 7982

accacgcgtc cgatactctg ctatctcgcc gtgatcgtga gtgatgattc cgtctggttg 60
ctactgatac actattgttc catatcggtt ccatttgaaa tatgcgttgt tcttaaaa 118

<210> 7983
<211> 372
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-A9

<400> 7983

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gtcttcgggc cggccgcgaa gagagcaatc aagcaagaca agatggtgaa gctcgccttc 120
ggaagcgctg gcgactcctt cagcgtcacc tccatcaagg cctacgtggc cgagttcatc 180
gccaccctcc tcttcgtctt cgcgggcgtc ggttccgcca tcgcctacgg gcaactgacg 240
aatggcggcg cgttggaacc ggccgggcctg gtggcgatcg cgatcgcgca cgcgctggcg 300
ctgttcgtgg gcgtgtccgt cgcggcgaa atctcgggcg gccacctgaa cccggccgtg 360
acgttcgggc tg 372

<210> 7984
<211> 293
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-B1

<400> 7984

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taactttact aatagtttac aagctacatt tctgtataaa aaaataactaa tgatactttt 120
tccatcccaa gtccggccgg caaactctgc acatgcatgt atggacctac tgaagcttcg 180
gacaggccgg ggcagatggc gtcgacatgg aacagaggct cgggtagcaa gcttgcttcg 240
acgccgggtc ctcttccaac ggaggcggca cctggccgta tatcatctcg cag 293

<210> 7985
<211> 363
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-B11

<400> 7985

gtccaccgac gcgtccgcac acgcgtccgc ccacgcgtcc gccacgcgt ccgggaaagc 60
agagagagcg ggaaatcatg gagctctgcy tctctacaac tgccctccgtc ggcgcaaccg 120
ccgcgccaat atccttcgcc ccgccccggc aaggcgcgtc tgcccttcacc gccctcccgc 180
tccaccgccg aatcccaact cgaggctggt gttgcgccag cgcggccgtg cctgaccggy 240
cgccctccga agagctcgca tccgcctcct acaccgtcgt cgtcgcggac aagcccgatt 300
cgcttgccga tgacaaggtc gacgaggtta gcgccgcgcc tagtggtcc gcggaggcgc 360
ccg 363

<210> 7986
<211> 338
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-013-Q1-E1-B3

<400> 7986

gcgtcgaccc acacttccga caacacacac ccgacaacat taacacacac ttaaaaaatc 60
aatctcggtc attcttaacc ttaaccagg aacctataac ctacccaaaa caggattaat 120
aatggcggtc tcaacggtgg caaccctctc tttcccggtt acaacggcaa ctttcgcggc 180
ggcgggcgcg gcggggcgcg ccgacgtgct gatcgctgct ncgangaagg cgggcgcneg 240
gcgcgtcgct tggttccccg cggcgggcgcg ccgcgggcgc cggcggttgg tcgcccgtgc 300
gtccagcggg ccggccacgc cgtcggagat ctccgaca 338

<210> 7987

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-C1

<400> 7987

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gattgatact gcgctgcctt gcaaattggt atgtaaatct acggctcaca agaaaacaac 120
acgtggattg agtacatggc accacaattc tgctgctatc gttacatctg tgagtagaaa 180
ttttgctgtg gtgcatgaag tgcagcaagc actgcagctg ctgagagtta tatgacagaa 240
gtattcatag tatagtacag cgcagatgaa tattatagtc tcttcttcca agggttttgt 300
cgattcgagg aacagattag tcaaattttg tgggtgttag acttctgacc tccgtttgtg 360
catagctcag cttcatccaa aactatctgc tgtcacctaa ccaagatggt 410

<210> 7988

<211> 361

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-C10

<400> 7988

tttttagcgt ttatccaata cttcaaaaat actttgcgct caaatgtggc cttatttggt 60
agctggtact acagatcaaa taaataactt gtacaaccat cgaaccatca taattccaca 120
ggccacagct aatagaatat acatacagga caaaatcagt gaatatgcaa gttgctacca 180

acggataagc tgtacaaaaa atcctcaaaa acgaaaaaga gaagaaaaaa aaacatacca 240
tctcaacaga caacactcac cgcccacaac acttacatga gatgagcaat aacaatctca 300
atctataaac agagcacagg gcactgcata attccagcca acgcatttac cagcgccaat 360
c 361

<210> 7989
<211> 418
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-013-Q1-E1-C12
<400> 7989

ttcacgggtc caccgacgcg tccgaaactg aaaaaaggcc atacaacctc aaggaggcaa 60
ggtgataata cgggaaacct tggttggacc aggatcttcg ccttgcaacc ggaaaacctt 120
gaaaacgcaa tgctggtttg ttcccaaac catgacaatc aacggtgtca accgaaatga 180
ccaaaattgg aaaaagataa cctttgaacc cgggttaaca ttttacaaga tcatacctgt 240
cctgggcact cgatccataa ttgaagtctg cccatagaaa ccaatataat taaggatggc 300
aacagcctcc catcgccctt gcgagtataa ttccaaacca gcacttcaat acttgaatcc 360
gtgaggtttt gaggtcactt acgtgtntta ctattgtac gcttttaaac aataacta 418

<210> 7990
<211> 400
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-013-Q1-E1-C2
<400> 7990

attaccgggt cgacgcacgc gtccaccac acgtccgggg aacacgagtg gttccagaca 60
cgcgcaaggg tcttgtccgc gttggtaggg gtgaagaggg attagtccat tttcagtggc 120
ttgaccgtgg acagaacata gttgaagatg atcaaactat ctttcctgat gaggcgggtc 180
ttgagaaggt gacagaatct cctggaaggg ttacatctt gaagttaag caagacagca 240
gaaaattctt cttctggatg caggaaccaa atgctgatgg ggactcccag acttgcattg 300
aagttaatgc ctacataaat cgatcattag atgctgaggg tgatcttcga gtacctattg 360

aagcagaaat gtctgaagat acggctgatg atgatatctc

400

<210> 7991

<211> 398

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-C4

<400> 7991

cgtccagaaa attgattcct tgtcggatcc ggccttgacag gaattctcgg cggcctcaaa 60
tttgatacac cttgggttcc gcgggaatat attgtcaagc tttgggcttt tacagtgtgt 120
accccctgtc acactctgtg tgttgatttt aagcggctgt tggatcttaa caggcgatgc 180
tatttcaaca ttccgtaagc gtcattctac gattgaattg agacatgagc tcctgcacga 240
agttgaggaa aattttgttg gtggttccca atttcgtaaa cctagacgca gacgatctcc 300
tcatgtgaaa gcagaagttg gaaacagttt tgctggctca agtaggctac acgatatccg 360
ttttgtagat gaaaggataa aatacagcaa ggaggaat 398

<210> 7992

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-D1

<400> 7992

gtcgcgcac gcgtccgaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaatgga aataaaaaaa ataaaaaaa aaaaataaaa atttaaaaaa aggggggggcc 180
cttaaaaagt tttccttttt attttttgtt ttctggaatt ttaatttttt tctttttttt 240
catctacttt ttttttatag gctctttttt tttaaaattt ttgtttttta aaacctttgt 300
tttttttaaa tttttccctt ttttaaaatt tccttttttt aaaatgtggc tttttttcaa 360
agggtttcta tttttttccc ttttcaaaat ttttccgggt ctttatcttt tt 412

<210> 7993

<211> 424

<212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-013-Q1-E1-D10
 <400> 7993

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 gagatgcaag cccggggccat ttttgaagct gctatagcaa tgaccaacca ggggtgttcaa 120
 gtgttcccag agataatggt tcctcttggt ggaacaccac aggaactggg gcatcaagtg 180
 actcttatcc gccaaagttgc tgagaaagtg ttcgccaatg tgggcaagac tatcgggtac 240
 aaagttggaa caatgattga gatccccagg gcagctctgg tggctgatga gatagcggag 300
 caggctgaat tcttctcctt cggaacgaac gacctgacgc agatgacctt tgggtacagc 360
 agggatgatg tgggaaagtt cattcncgtc tatcttgctc agggcatcct cnaacatgac 420
 ccct 424

<210> 7994
 <211> 408
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-013-Q1-E1-D2
 <400> 7994

ggtccagaat tcacgggtcg acgcacgcgt ccacctccct ctccgcctcc cgtccccaag 60
 gccaatagtt ttcaagtggc aatggcggac caggctaacc aaccactgt cttcataag 120
 ctcggtggcc agttccacct gcgctcgatc atctctgaag gtgtacgggc ccgtaacata 180
 tgcccatctg tctcatctta tgaaaggaga tttgccacaa ggaactacat gaccagagc 240
 ctttggggcc cttcaatgtc tgttagcggg ggcataatg tcccagtgat gcagaccccg 300
 ctctgtgcta atgctcctgc tgagaaagga ggcaagaact tcatgattga tttcatgatg 360
 ggcggtgttt cagctgctgt ttcaaagact gctgctgctc ccatcgag 408

<210> 7995
 <211> 255
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-013-Q1-E1-D8

<400> 7995

cggacgcgtg ggcgctcaag gccctgggca ggcccaacgc cgtggacggg accatgtcgc 60
 cgccgttgcg cgaggagttg atgattgcgt acaaggacga cgaggtcgtg gacgcctgag 120
 tgcggcaagc agagaggagg atcgacgcca gcagcgtctt atcttaattg ccttgttggt 180
 caatgatgaa tcgatcgaat tcccttgggt tagctttatt attgttggtg ttattattaa 240
 caannannan nnnnn 255

<210> 7996
 <211> 416
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-E1

<400> 7996

ggtccagaat taccgggtcg acgcacgcgt cgcgccacgc gtccgaataa ttcagcggtc 60
 gtcgaatact gcaggacgtc aatggctgcg ctttctggga gcaccgctgg acttctcggc 120
 ctcaccgggtt tcttcggttt cggcttttat gtattcgcgt ttgttggcct ttggggactt 180
 ttgatgctaa aagcaggttc gcaatggaaa aaatattttg ttaatagacg ggtcatactg 240
 accaatgggtt tcttcggtgg attattcaca tacatcttgt tttggacatt tatctacgga 300
 atgggttcacg tttattgagg gaggatcaaa tgtgcctttt cattctgcat ttttaattta 360
 attatatacc atttttatgt ttgttggtct atttattaca ataaaaagtc cttttt 416

<210> 7997
 <211> 435
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-E12

<400> 7997

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 gcctgcacac cattgagaat gatgggcttt cgggcgattt cacatcatca tcttaggtat 120
 gatttcacat ctttttatct tcttggtgcaa cgggtgccac ttctgggtctc ttgctatttg 180

gttaaccgac ctatgatcac acgagccaag gacaggctgc cagtgatccc aatgactgta 240
 accatgattt gtttttatct tgcattggta tcttgtatag taatggttca gtgcatgatg 300
 caaactaaac aatgtctata tagttgcttt tatctttgcc atggctattg tgggaactgg 360
 gaagtatcta gtctgatgt gggaccttat atgttggcat ctggaagatg gtttttactg 420
 gatggatact gttag 435

<210> 7998

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-E3

<400> 7998

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 gtaatctggt ggtacgacga catggcggcc accagcagca agtcgtcgtc gtcctcgagc 120
 tcggcgcagc gggcagctgc cgcactgctc gtggccgccc cgtggcggt gtcctgctg 180
 gtggtgggcg cggcggcggt gtgcgacatg agcaacgagc agttcatgtc gtgccagccc 240
 gcggcggcca agacgacgga cccgcgggcc gcgcgctgc aggcgtgctg cgacgcgctg 300
 gcggggggcg acctcaagtg cctgtgcggc tacaagaact cgccgtggat gggcgtctac 360
 aacatcgacc ccaagcgcgc catggagctt cggccaagt gcggcctcgc cagccgcccc 420
 gaatggt 427

<210> 7999

<211> 270

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-E9

<400> 7999

accgacgct ccgaaaaaaa ataaataaaa aataaaaaaa aaaattaaaa aaaaaaaaaa 60
 gattttaata aaactaaata aatatttaac ggatgatata atgtaaagct agaaagtctt 120
 catgtgagct tcgatggaat cgattcgggg gtcggtcacc ggagggctta gcttgagatt 180
 ccttcgagtt taaatgttac ttattttcaa tgggccttat atttaaattc tctggccggg 240

gtttttgcaa attttccctt ggaaatcccc

270

<210> 8000

<211> 130

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-F10

<400> 8000

ggtcaccga cgcgtccgac gttccgttcc ttccgtccat ccatccgcca tggcgaccgc 60

tacgtactg agctcctcct tcgccatgcc cgccgcccgc cgtagggcct cctccccctc 120

ctccgcctca 130

<210> 8001

<211> 414

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-013-Q1-E1-F3

<400> 8001

gcgtccacgg acacgtgggt cgacccaggc gtccgccac gcgtccgccc acgcgtccga 60

tctcctcgct ccagtcctcc gggaagcatg gcgtccgtca ccgcccgccg cccggtagcg 120

gcccttcgcc cgtcgtcggc atcgtcaag tcgtcgtcgg ccttccttgg ccactctagc 180

cgcctcggcc gcaccgcgtc tcccacgagg cgcagcctca aggcggaggc caagggcgag 240

tggtccccc gacttcctc cccctcctac ctgcacggca gcctggcggg tgacaatggc 300

ttcgaccctg tgggcctgnc ggaggacccc gagaacctgg cgtggatcct gcaggcggag 360

ctggtgaacg gccggtgggc caagccttgg ccttggccgg gaaggccac cccg 414

<210> 8002

<211> 440

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-013-Q1-E1-F9

<400> 8002

ttcacgggtc caccgacgcg tccgcccacg cgtccgccac ttcttcggct gatcgggctg 60
ctgctcgatc gatctacttg cgtacgtagg ctgctcccca ggaccagaag gagcatgcat 120
ggagggcgaa cgaagtcaacg ggggtttgat tgcccgctca tgtatatcat gtgtagttac 180
tgatgatgtg tgtgcatggg acttcgtacg cgtgtttggg gatcgatgtg tgggtgtgtg 240
gtctctgcat ggacattttc ctactctgcg ttttttctct ctctactgat atagtatata 300
tgtggtgtgt ctatatatgt gtgcacgtgg ttttcgctcg gctttttatc aacgctttga 360
gaataaaagc tttctcttca tctgtatatt ttatttttaa tgaaagaaat aaaccactat 420
atatttcgac actcttaaaa 440

<210> 8003
<211> 212
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-013-Q1-E1-G10
<400> 8003

gtcgaccgac gcgtccgga aatgatcgag tacatggata aggtcacgaa aacggttgcc 60
acggaggagc acacggtgga ggaccccatc gacgagtccg ttgcctagac gatcgtcatt 120
ggaaccctcc gtgcatcatg gcgtatcaca tcgtccatcg agccgacgga cgaggggtcaa 180
ggcgatgatg accgtattac agacattatg ga 212

<210> 8004
<211> 439
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-013-Q1-E1-G12
<400> 8004

tcgaccgacg cgtccggaga ccaacaagca acatagaaag tggaatccag tagcaacaat 60
agagcaacaa tggcgaccaa gatattttcc ctcttatgc tccttgctct ttcggcatgt 120
gttgctaacg cgacaatttt cctcaatgc tcacaagctc ctatagcttc ccttcttccc 180
ccataccttc catcaatgat agcttcagta tgtgaaaacc cagctcttca accctatagg 240
ctccaacaag caatcgcagc aagcaacata cctttatcac ccttgtttca acaatcgcca 300

gccctatctt tgggtgcagtc attggtacaa accatcaggg cacagcagct gcagcaactc 360
 gtgctacctg tgattcaaca agtagctcct ggcaaacctt ctcnctactc tcagcaacaa 420
 caatttcttc cattcaaac 439

<210> 8005
 <211> 409
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-013-Q1-E1-G2
 <400> 8005

ggccaagaat tcacgggtcg acgcacgcgt ccgccacgc gtccgccac gcgtccggga 60
 ttatttaciaa gcggtattca agctcttatt ttgcaacgt tagccgcagc ctatataggt 120
 gaatccatgg aaggatcatca ttgaattaac tagtttttga aatagtcttt ctttttttag 180
 cttagcccaa ttcattgcatt attccggata atcctcttag ttggaaaact aaatagttcg 240
 aaaggcgat gaatatacaa cctagagttg taggagagag aatagactat attatggaag 300
 aggtaaagta tatatgcatt cagggggggc aagtcaggtt agatctatat ctttaatgcc 360
 tataagacag tcattctttt tgtggctttc taaagaatga ttttagaat 409

<210> 8006
 <211> 407
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-013-Q1-E1-G9
 <400> 8006

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 cctcgctcc gcggcgggcg gcggcgggct gctgctcgtg gtggcgggcg tcctgctgtg 120
 cctgtccgtg cctccggggc gcggcgggcg tccaggcgcg gaggtcgcg agttccctgg 180
 gttcacgggc aaactccct ccaagcacta cgccgggtac gtaacagttg gtcgccatga 240
 gcaacgaaag agacacctgt actactacct tgccgtctct gaaaggaacc caagcttgga 300
 tcctgtggtc atctggataa atggcggtcc agcatgttca gggtttagtg catttctgca 360
 ttcatttgga ctttttcgaa tggagggtc ccaagttcat atcaacg 407

<210> 8007
 <211> 438
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-013-Q1-E1-H11

 <400> 8007

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 agctggcaac ttccgccaga ggtgtgtgag atcctcaaga atgcggaatc tggttcctta 120
 aaagaaggtt caacttcact gcaggatgct gcaactatag agaataaggg agtaataagc 180
 attgatgcaa gtactcctgc catacagaca ggtggccgtg attcgttgcc acttcggcaa 240
 acagttgccc ctgcatcgcc atctccattg gatttaataa agaagaaatt gcaggatgct 300
 ggtgcttcca gtgcgccttc agctctggct acttcatctg ctacctctga attgaatgga 360
 tccaaaccag ctgatgctgc acttaagggg caactagtgg cgaataatgg tgagaaatta 420
 nnnagataca atggtgat 438

<210> 8008
 <211> 420
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-H3

 <400> 8008

acgctgccag tacgggtccag aattaccggg tcgacccacg ccgtccgacc aacgacgac 60
 cgaccacacg accttctcgc gactactgcc tagcacaacc ctgtacaacg caatataccc 120
 tgctaccatc ggtcctgacg aaacaggaaa accaccagtc acagacgcgc tagcacgaga 180
 agatggagaa ctcagcggac cgatcgcagt tgacgcctac gaagatcaag gtgttctacc 240
 agacgttcgg cgtgtagaac aaggacatcc acgagttcag ccacaactgc accagcacc 300
 tcgaccgcag gaactcctcc gacgacgtca tgctccacta cgagctgctc aaggacgacg 360
 tcagccacat agtctccggc aaggtgatct tcagcaccaa ctgcaactga tccagctaca 420

<210> 8009

<211> 314
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-H4

 <400> 8009

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 taggtatata tatgtgcctc catcatcatc ggaccggaat aaagctagca atctctcttc 120
 ttcacgatcg agagatagcg cgcgtgctg taattaagta ttatagatta ctacatacta 180
 tatatatgtg catgcatgat gcatgcgtat gtgtatctat atatcatgtg atggtttgta 240
 tatgagctag ctatagctag agtcgtgtgt aatagcatac taaaactaa gctaatacaa 300
 tatccaagtt tgct 314

<210> 8010
 <211> 430
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-013-Q1-E1-H9

 <400> 8010

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 tcagggagct ggaggaagcg agcaaggagg agcagctcac aaagtgatca cgcgggcgaa 120
 tgggctactc atcagctctc tatctgagct tcgtagcaa ataagttcag acttctcttt 180
 actgccatgc tcaagtctgt atatggccaa aacccaaaac gattgatcaa ctgcgctact 240
 gcagtgcaat agcaggatac gtatagtttt cttttcaagg gaaacaggag gggagtgcag 300
 tgcacccccg ccatactgc atgttattaa taaaagaaag ttatttacag aatcaaaaag 360
 taaacaaaac ggaatgagcc ccctgaaaca aaaccatgtt aaaacccgtg ctggtggcca 420
 catcaaaaca 430

<210> 8011
 <211> 327
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-014-Q1-E1-A11

<400> 8011

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agagaagaaa gaagagaaaag aagaatccga tgatgacatg ggtttcagtt tgttcgagta 120
atgcgggtata cttggcattt ggttttgctg taccctttcg aaatctttat gtcgttgttt 180
agtttgttgt attcgactat cttcttagac tttgctgaaa ttctcaagag atttttttac 240
tcaaacatca gtccacttgt gattggcatt tatatttcaa aaaaaaggat atgagtgaag 300
gcgctggaaa aggccaaaaa agataac 327

<210> 8012

<211> 348

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-A5

<400> 8012

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acttaggtca tgcattgtaa acatatttgg catagctttg tttctccttg tgtataacta 120
cggattcctt aaattttctgc aggatgaatg gacaggggag cagaagggtc agtacagtga 180
cataccagat gacatcgagc cagaagagat taggccgatg ggaaactatg cagtttctat 240
aacttggcct gatggattta gtcagatagc accttatgac caattggaaa tgctggagcg 300
gttggtggag gctccgagtc cagcagcagc gtctgcagtg gcctcgtc 348

<210> 8013

<211> 312

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-A9

<400> 8013

cccgggtcga ccacgacag tccgagcggg tcatcgtgtt caccaccaac cagtcgaaga 60
agctggaccc ggcgctcatc cgagagggc gcatggacaa acacatcgag atgtcctact 120
gcggcttcga ggcgttcaag ttctggcca agacgtacct cgacgtggac tcgcaccctc 180
tgttcgacgc cgtcggcgag ctactccggg aggtggacat gacgccggcc gacgtcgccg 240

agaacctcac gcccaagagc ctcgacgacg ggccggactc gtgcctcgcg gacttggtga 300
aggcgctgga ag 312

<210> 8014
<211> 413
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-B2

<400> 8014

ggtccagaat tcacgggtcg acgcacgcgt ccgcccacgc gtccgtatct agatcgagag 60
ctgccttgct tgcacatgca aaaccgcca aagcgagcgc ctcatgtctt tatattgctc 120
tcaaaccctc cgtttctcgc tccaaccac tgccactgta cttgtgttgt gttgtgttgt 180
gtgctgcaag aagaagagga ggaggaatag catgtgctga gaagcctgcc agcgcgcttt 240
acgacaagca tatatggggg agatcaccaa gcctttgcga agcagaagct tccgaagatg 300
gcctacgact actacgcgtc cggcgccgag gatgagtgga cgctgcagga gaacatggac 360
gccttctcca ggatcttgag cagcggttga tgagataaga ttgccaagaa acg 413

<210> 8015
<211> 417
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-B4

<400> 8015

gggtcgacgc acgcgtccac cctgcaaagg tgaaggcatc aaaggcttct gcaaaaaacg 60
gcaccgcaac tccagctatt tctaccggy caaagggtggc ccaagcagca acagaaaaac 120
ccgtgctcgc caacggattc cctaaaaccg gttagctgga ccgcccact gatgctccat 180
acctaccgc aagcaacggt caacttcccc aagagctcga ctgaattgct gtacaaggga 240
actattgacc aaccaaggca ggctgtggaa ctgggcagge atggcgccct agagcgttgc 300
ggctccatct cgtcgtgcc ggagagcagc tggctagctg ttagcgtttt ccctagtttc 360
tctctctccc tctctctctg tcgctgtgtt ccccgtttca gtttcttat agccccga 417

<210> 8016

<211> 295
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-014-Q1-E1-C11

 <400> 8016

 gatctgctcc acccatagct gcagttgtgg ctgcacgtac ttgttgagct gttgtgttgt 60
 gtccatctcg gtactttttg atttgttatt agtagtaact gtgatgacga tgcattgggt 120
 gctctgtctt ctgcagctct agcattacac tcactactac gtgtgctgtg tgtaccgttt 180
 tgtattgagt ggtgacttga acgtggcgct ggtgatttgt actaccttct ataaataaaa 240
 gttgaaaaaa aattacaaaa cattgaaaaa atctctgcaa aagaaaaatg tgggg 295

<210> 8017
 <211> 462
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-014-Q1-E1-C2

 <400> 8017

 acgtgcagct acggtcaaga attcacgggt cgacgcacgc gtccaccac gcgtccgaat 60
 gaatttgctg attaccataa taggatgctt caggaggatt tggaaaaact caggaatctt 120
 caccctgatg taaccatcat ttatgctgat tattacgggtg ctgcattgaa catattccgt 180
 gccccactca agtttggctt cacagtccca ctgaatgcgt gctgcggaag tgacgctccg 240
 tacaactggt ccccttcaat actgtgcggg cgtcctggat ctacagtgtg ccctgaccca 300
 tcaaaatata tctcatggga tggctctacac ttcaccgagg cgagttacaa agttgtcatc 360
 caaggagtac taagggggta cgccaaacct cctctttcag aagcctgcaa aggtgcggag 420
 ttcaaagttt ctcaactttc acaatgtaca gataatccaa ca 462

<210> 8018
 <211> 409
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-014-Q1-E1-C4

 <400> 8018

ggtccagaat taccgggtcg acgcacgcgt ccaaaatggt ccagtgtttt ataaagaagg 60
 aataagtcaa aatccactta cgggcctcta cttgtgcctt accaatgttg ttacttcaga 120
 aagtgggaaa ttctctttat cagctatgcg acaccgctta accacatgga ccgagtatac 180
 aatatcaatg gattctggca acatctcagg atcaaaatta acctacattg gaaaaataac 240
 gtctaacttc ctaggcacaa gatttttaat tgatgataca caatccccct ataatggggc 300
 tgtaattcct cctgccggaa ggaccaccac gaggttcaac tccacaaaag tctctccaaa 360
 gctgccttca gtcagttata acatcgcaca tgtatcgtat gagctaaat 409

<210> 8019

<211> 107

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-C7

<400> 8019

cccgggtcga cccacacgtc caccacgcg tccgacagca catcgatcga cgacgatatc 60
 gggaagcaat atgggggttg ccttgtcgcg gctggaggag attagga 107

<210> 8020

<211> 434

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-C8

<400> 8020

gacccacacg tccaccacg cgtccgacag cacatcgatc gacgacgata tcgggaagca 60
 gtatgggggtt ggccttgtcg cggctggagg agattaggac gcagtaccgc atggcagcgg 120
 aagacggcga ggctgacagt ccggcaccgg cgccagtgtc gccgaccggt gctgctgctg 180
 cttccggcgg cggcactgag aagaagaagc aggcggacga ctcgtcgtcg tcgtcaaaga 240
 cgacagaatg ggttctcat aagttctctg agatcgtcgg tcaaagacga cctggtgagg 300
 atatgttccg agggatcgac cttccacgat cggatcagca gccgaaagca aagaagtact 360
 gggtagatgg gagaaatgca aactgcctca tgctgttccc taaaggatca gcatcacctg 420
 gggttcggac gcaa 434

<210> 8021
 <211> 299
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-014-Q1-E1-D1

<400> 8021

gtcaagaatt accgggcccga cccacgcgtc caccacacag tccgcccacg cgtccgggtg 60
 tangtgtact caccagggca tcattctggg ggaagggatc gagttcctct gcctcttctg 120
 ttgctttcaa ctctctgga gaggcataaa aatactcaac ttgctgcata agactactta 180
 ttactgtact tggggcctgg gggacaaaat ttctctccat gactactagt ctactaccat 240
 gtaaagtgan gagtttatat tatatcctgc aatatatact acctattatc tacagtatt 299

<210> 8022
 <211> 430
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-D2

<400> 8022

gtgcggtcca caattaccgg gtcgacgcac gcgtccacac ctggagacat gcattccaca 60
 tcctgcgaag caacatcatc aatgcttgcc atgtcaccag aacaggctgc gcttttccac 120
 attaccgaga gcttccgcta tgccgcgctt ctttactact agcgcctagc gcagccgact 180
 cttcccgtt cagctctgaa cttccaaaac ttggtatcac agggacttta ccacatttct 240
 cagattggta tgacgagctg cgtaacaag ttctactat ggccattatt cattattggc 300
 acggaatgcg ttgaccctga acaccgcgt gtggtgcgac aacgatgtgt ggagattcaa 360
 cgtgagagcg ggttcttcaa caatctcagt ggtctagaag tgctcgaac agtatggcgc 420
 gaagatgacg 430

<210> 8023
 <211> 271
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-D3

<400> 8023

gtgcggtcaa gaattcacgg gtcgacgcac gcgcccgaag agagtgcctc ggtaaattgg 60
gagcttggag gaagtggaca aggtggagaa attcctggct tgaatgtccc tgcttcatgc 120
cagagctctc tcatcagatg gactcccaaa gacatcaagt ttagggaggg aatatgtact 180
ctctctttcc caccaccaat aagtcttctt cgtctcatat ttcgataaat caaacaatct 240
caattttgat ctaatatata cacacaacat t 271

<210> 8024

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-D4

<400> 8024

ggtcaagaat taccgggtcg acgcacgcgt ccaccggcat aatccggcgg cataggctaa 60
gaaaggggtc ctgcccgtcg tcgacaagaa ggctgggtac tctttcctct acccggtcgg 120
atgggaggaa gtggctgtgc aagggaaga caaggtgtac aaagatgtga tagagcctct 180
cgagagtgtg agcgtcaact ctattccaac tagcaaggag gatatccgtg atcttgggtc 240
tccggataag gttgccgagg ctctgattaa aaaggttttg gcaccatcaa cacagaagac 300
aaagttaatt gaggcgaaag agaatgatgt tgatgggagg gcttactaca cttttgagtt 360
cacagctcag gtcctaaact acaccagaca tgcacttggg gctattgtaa ttgcaaattg 420
caaattttac acattga 437

<210> 8025

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-D7

<400> 8025

attcccgggc cgaccacgc gtccacggac gcggtgggtg tcgatctcca tctcgacct 60
cgctcaccgg gaagctacgc tacgacgaag catggcgctc gtcaccgccc gcgccccgg 120
cgcagccctg cgcccgtcgt cgtcgtcggc cttccttggc cactctagcc gctcggccg 180

cactgctacc gcgtcgccga cgaggcgag cctaaaggcg gaggccaagg gcgagtggct 240
 cccgggcctt ccctccccg cctacctga cggcagcctg ccgggtgaca atggcttcga 300
 cccgttgggc ctggcggagg acccggagaa cctgaggtgg tacgtgcagg cggagctggc 360
 gaacgggcgg tgggcgatgc tgggcgtggc cgggatgctg atcccgagg tgctgacaa 420
 gggcgggctg a 431

<210> 8026
 <211> 420
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-014-Q1-E1-E2
 <400> 8026

attaccgggt cgacgcacgc gtccagcaac accgcaatca gactctgcca tggttttctt 60
 cataacaaat aagctcgggt ttactccaaa atttctagga cgcgttacgc ttgtcaaadc 120
 tggtgcatcc ttactgggaa tcggagtgtg taatttggtt ctgaaggaag ttccattgag 180
 gaaaatcttt cttgtgacaa cagtcttagg ttctgctctc ggaatgacac aggttcttct 240
 tgtcactggg ctcaaccgga agcttggcat aagcgacgaa tggttctcca ttggggattc 300
 tttgattatc acagtcctcg gccaggcttc ctttatgcct gtcttggtgt tggctgcaaa 360
 gttgtgccct gtgggagcgg aagcaacttt atttgccact ttgatgtcca tctctaacgc 420

<210> 8027
 <211> 309
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-014-Q1-E1-E4
 <400> 8027

gtcaagaatt cacgggtcga cgcacgcgtc cacggacacg tgggtgcgaa ttgggaagag 60
 agtttttagt tagacgagct tttgatggc ctaaagatgt tttcccgat gatgtttgtg 120
 ctgctggacc gtttcctgtt agcttcgatg gcatcctccc catatcgata aactgttgct 180
 taccctgaca atcgggaagag tttaaagtgt aaagatttaa aaaaaataa aaaaaaaag 240
 ttctataaaa aaaaaggacg caagcagctc gaaaggaata aaacaaaaac tcgtcctcca 300

tggtagatc

309

<210> 8028
<211> 389
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-F10

<400> 8028

gggccacca cgcgtccgac cgcgcgtccg gcatttactt atatacaacg agtcatgtag 60
ctgtgatgta acttcctcta acttggtgcc atgtggactg gagtcaccga tgtgtgctgc 120
caagtgtctg gccaaccgt tgaacacgtg gagagatgct ctccatatct ttagaggagg 180
atataaggtg atttgatgat ttatttatta agtgtttgta cctaaaaaaaa aaaaaaaaaa 240
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaccccc aaaaaaaaaa 360
aaaggggggg ccccccaaa ggtttcccc 389

<210> 8029
<211> 396
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-014-Q1-E1-F4

<400> 8029

attcacgggt cgacgcacgc gtccgcccac gcgtccgcc acgcgtccgc ccacgcttcc 60
gcaagcagga ggcggacaag gtaagcagca atcccaggaa ccctaccgcc gccgaaccgc 120
caggaatggg tatcgacctc gtccccggtg ggaggaataa gaagaccaag cgactgcgc 180
ccaagtctga cgatgtctac ctcaagctcc tcgtcaagct ctaccgtttc ttggtcanga 240
ggaacaatag caatttcaac gctgtcattc tcaagaggct tttcatgagt aaaaccaacc 300
gaccaccaat ctccatgcgc cgccttgtca agtttatgga aggaaggag aagaacattg 360
ctgtcattgt tggcacagtc acagatgaca aaagga 396

<210> 8030

<211> 463
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-014-Q1-E1-F6

 <400> 8030

 taaaggtcta aaattccccg gccgaccac gcgtccaccc acgcgtccgg ccggcgctc 60
 ccacgtctcc agtccgacac tccgactcac tccccctccc ccgccccaac ccgtcgcaat 120
 ggccgcccgtc tccgcagccc cgaggccctc gatgcctccc cgactcgccc tccgtgcccc 180
 cctcttctcc tccgcctctc cgctcccaat gcgcgcgctc cccttactcc gcagccgctt 240
 ccgtccttg accacggcct acgtgtcaa gcaggacacg gccctctgga cccctgcacc 300
 cgtctccgcc atcagtgtg ccaccgacga cggctccgtc tccctcatcg ccgtcgacct 360
 atctgacgcc acggacctg tggactcgta cacgaaccg ggccaatacc tcttgattcg 420
 cgttaccggc gaggagctca agccggcgta catggtcac tcc 463

<210> 8031
 <211> 384
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-014-Q1-E1-G12

 <400> 8031

 aagctctctg ctagcaccca tcttgacga ggccggagccg cccgaccga tccgtgcgtg 60
 tgtgttggtg gagatggcta cagcagctta cgctcccatg gcgagccagg tgatgaagag 120
 catcccgggtg cactcgaggc cgaggggcct gtcaggcgct gcgtcacgc ggccccggcc 180
 ccggttcagc gtcgtcaagg ccgccatcca tcccgagaat gcaacgtacc agctggtgca 240
 gcccatcaac ggccgaccgt tcatcggcag cctggagacg cccgtcacct ccagcccgtc 300
 catcgctggg tacctctcca acctgccggc ctaccgcacc gccgtgagcc cgctgctgcg 360
 gggcgccag gtcagcctcg ccca 384

<210> 8032
 <211> 353
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-G6

<400> 8032

ttttgactaa tttctttctt tttcctcgag aaacatcata tcatttcacc cttatgtacc 60
tgacaatatt acactggagg taaacctagg cagtcaaggt acagggaaaa aaagaacaag 120
aaaccgtttg cttctttttc tttcccggtg cggttctagg gcacaacttc gcaagtgtcg 180
cagatatcca gccgacgaag gaggttaggc tatcggtgcc tcgccgggag cccaccgctg 240
ccgctcttgc ggatgaaagc gtttctgctc ttcggctttg gtatgtcatt gatgtccatc 300
acttggaattg tcctctgctt tttggcattt tgtgcttctt ggtaattctc cct 353

<210> 8033

<211> 357

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-G8

<400> 8033

ttcccgggcc gaccacgcg tccagatggc cagcctcacc gacctcgta acctcgacct 60
gagtgactgc accgacagga tcctcgccga gtacatctgg attggaggat ccggcataga 120
cctcaggagc aaagcgagga cggtgaaagg ccccatcacc gaccgagcc agctgccgaa 180
atggaactac gacggctcca gcaccgggca agtcccgga gaggacagcg aagtcacct 240
ctaccctcaa gccattttca aggaccggt caggaagggt aaccacatcc ttgtgatgtg 300
tgactgctac acgccacaag gcgagccaat cccaccaac aagaggtaga gcgccgc 357

<210> 8034

<211> 385

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-014-Q1-E1-G9

<400> 8034

ttcccggggc caccacgcg tccgaactct cctcctccag agctcgtcgc caccggccac 60
cgccaccctc gatcacgccg tccgtcgagg taaggtcagc atggtgaggg tcagtgtgct 120
caacgatgcg ctcaagtcca tgtacaacgc tgagaagatc ggcaagaggg aggtcatgat 180

caggccgctcg tccaagggtca tcatcaagtt cctgacgggc atgcagcgcc acggctacat 240
 tggagagtgc gagtacgttg atgaccaccg atcgggcaag atcgtgggtcg aactcaacgg 300
 gaggtgaac aagtgcggcg tcatcagccc tcgctttgat atcggcgtga aagacattga 360
 gggatggact gcaaggctgc tcccg 385

<210> 8035

<211> 454

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-014-Q1-E1-H1

<400> 8035

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 caaggtgcta agaggtccat actagggctt ctctttcgtt ctcagcacca aactgctcgg 120
 gcatactctt cttcagcatt ccagactcac caattgagca ctcattgtcc ccaagatgga 180
 gtgtttatta ggagattcgg ctctgagggtg tcttcttcag agcaaataaa ccttattaag 240
 caactcagac aaagaacgag tgctccaatc aaagatgtca aggcctctct agttacctgc 300
 aactgggata ttgaggctgc acagaaggac ctaaggaaga gaggtgttgc tcttgctgcc 360
 aaaaagtctt cacgcactgc tgctgaagggt ttgctagcta tcgcacaaga tgacaanaag 420
 gctgctgtag ttgagcttaa ctgtgaaact gatt 454

<210> 8036

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-A1

<400> 8036

gaccacgcgc tcaggactag ttctagatct gagttagccg gcggatccga tccgtgcgcg 60
 tgcagtgtgt gtgtgtgtgt gtcgggtggag atggccacag cttacgtctc catggcgagc 120
 cagggtgatga agagcagcct cgtcgtgcac tcgaggccga ggggcctgtc aggcgtgtgt 180
 gcgctcacga ggcggcccg cgggttcacc gtcaaggcca tccagcccga gaaggcaacg 240
 taccaagtgg tgcagcccat caacggcgac cccttcctcg gcagcctgga gacgcgggtc 300

acctcgagcc cgctcgtggc gtggtacctc tccaacctcc cggcctaccg caccgccgtg 360
agcccgtgc tg 372

<210> 8037
<211> 227
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-A2

<400> 8037

cggtcgagat ttcccgggcc gaccacgcg tccacgccag tacgccacca ccaccgagcc 60
tggtactaccg ccgccgccct tcgccgatat cctcagcggc gaacagcgcc caacagatcc 120
cgcccctgcg atggagtccg tggatgaacc gaaagcatac ccgctggctg atgcgcagct 180
gacgatgggt accctcgata tcattccagca agccgccaac taaaaac 227

<210> 8038
<211> 183
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-A3

<400> 8038

caaccaaccc tggaataccg ccgccgccct tcgccgatat cttcaccggc aaaaaccgcc 60
aacaaattcc cgcccttgca atgaattcgg ggggaaaccc aaaggcatta ccacatgcta 120
aaggcgaagc aaaagggcgg ccgccccaaa ggatccaagc ttacttacc ttgcatgcaa 180
ctt 183

<210> 8039
<211> 363
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-A4

<400> 8039

cggtctagaa ttcccgggcc gaccacgcg tcaggggcaa gggcaagggc gtgtaccagt 60
tcgtcgacaa gtacggcgcg aacgtcgacg gatacagccc aatctacaac gaggatgact 120

ggctctccac cggcgacgtc gacgtcgggtg gaaccactgg gcttctgata tgggccgtca 180
 ccctcgctgg gatcctcggc ggcggcgccc tctcgtcta caacaccagc gccctctccg 240
 gctaaggata tccaatgcat gcgcttcttg cgattcgtcg tgtaaaatca ggggtgtctgt 300
 ctataatcta gctccatgg atgtcaacc ttcgtcatgt aacaataatc agtgctactc 360
 ttc 363

<210> 8040

<211> 296

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-A6

<400> 8040

ccaggtacca gtctagaatt cccggggcga cccacgcgtc aggaccccaa cttctttctga 60
 gcgggccggct gcgggcatgt tcttgagcct gcctgtattc tactccgtgt gtgttgagcc 120
 atatatctga tgctcaagga ttggttaatt tgaacaagtg gtgcaactgc gcgtgtacat 180
 ggatttgctc ttcctctatg tctctgtcct ctgtctccgg ttactttccc tgtttcacta 240
 tgccatgcac atagacattg ccatgttctg ctgccagctc agggcttgtg aataac 296

<210> 8041

<211> 106

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-A7

<400> 8041

cgggccgacc cagcagtcag cggacgcgtg ggcggacgcg tgggtttttt ttgtaaggta 60
 cctacagggtt tgggtcatatg ataatttctc cggaacggca tacctt 106

<210> 8042

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-A8

<400> 8042

aattccccggg tcgacccacg catccgcttc aggttgccac ttacatactg tggaagaatg 60
 taccacaggg agctgcaact acttgctacg taggactgag ccctcaactc aagggagtga 120
 caggaaagta gtttgctgac tgcaacgtgg agaagacgag caaactggcg aggagcgagg 180
 agttggcgaa gcagctctgg gacttcagcg aggagctgat caagtctgcg aaatgagagc 240
 cgaaaatgtt gtggctctgc ttggcatcta gtggtacaag tgatgactga ttagtatata 300
 gcacggagga acctgggcca tggctggacc tcatggtgtt caggaataaa atctgcttgc 360
 tttcgtacat taattagtcc ggtgtggcaa acatcaattt g 401

<210> 8043

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-B4

<400> 8043

ggtcaagaaa tcccgggtcg accacgcgtc caccacgcg tccggagagg agctaccagg 60
 ctcacatcgc gggttcgcac cacttcccaa ccggaacctt caaggcccga atcccgaacc 120
 tgttccgggc cccaaccgga aaggaaacct cgttttccaa tgggccccta accaagtacg 180
 aggtccaact tgtgctcgga tgttctcaga ctatctatcg gagaccaagg aggattcagg 240
 gataaagaac atcatggtac tggagcgcgg gtttaacgga tgggaggttt cagggcagcc 300
 tgtctgcagc tgcaccgacg ctcatgcaa agggacttgt tcttaagcac acgagtttat 360
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<210> 8044

<211> 376

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-015-Q1-E1-C3

<400> 8044

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 gcctccgccg cgcgtacaag caggtggaga caggatgccg gctggccacg gcctgcgctc 120

gcggacgcgc gacctcttcg cgcgccccctt ccgcaagaag ggctacatcc cgctcaacac 180
ctacctccgc acctacaaga tcggcgatta cgtcgatgtc aagggtgaacg gcgccgtcca 240
caangggatg ccgcacaagt tctaccacgg ncgcacccgt cgcgtctgga acgtcaccaa 300
gcgcgccatc ggcgctcgagg tcaacaagca ggtcaatggg cgcacatca ggaagcgtat 360
ccatgtccgt gtggag 376

<210> 8045
<211> 73
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-C4

<400> 8045

cctaaaggat caaagcttac gtacccgtgc atgcaacgtc aaaccccttc aaaagtgtca 60
ccaaaattca att 73

<210> 8046
<211> 450
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-015-Q1-E1-D3

<400> 8046

ggtctagaat tcncggggccg acccacgcgt cagcggacgc gtggggatct gtgacttcga 60
cttcgagccc tgtggctact ccatgaatgc tgttcattggc cctgctttgt cgaccattca 120
tgtgaccca gaggacggct tcagctatgc aagctacgag gtcattgggt tcaacccggg 180
ctctttctct tatggtgacc tggttaagag ggtgctgagg tgctttgggc caactgagtt 240
ctctgtcacc gtgaccatct tcggtgatcg ggacaatgcg aagacctggg ggacgaaact 300
ggatgctgag gcctatgctt gcagcaacat ggttgagcag gtgctgccgt ttggtggctt 360
gctcatctat cagagcttca ctgttacggc cgaaacgacc catgggttcg ccgaggtcag 420
tcctgcatga cttegtgggt gacattgtca 450

<210> 8047
<211> 417



<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-015-Q1-E1-E1
 <400> 8047

cggtctagaa ttcccgggcc gaccacgcg tcagcggacg cgtggggtgc tcagttagga 60
 actgcgccaa gttgccaacg tcgctcggtc caccacctag ttccagcata gatgagattg 120
 gaggatgggg gacagtacca aactggagt cactaggccc cagtgttacg aagtctgaga 180
 aaggaatgca tttcatagga ggagagagcg cagctcttgg tagggtagat gactacttct 240
 ggaagaagga tcagctgaaa gattacaagg tgaccaggaa cggcatgtta ggtccagact 300
 actccacaaa gttctctcct tggcttgctt ctggcagcct ttccgcccgt tatatttgcg 360
 aagaggtgaa gagatatgag aagcaaagag tggcaaata ttcaacatat tgggtttt 417

<210> 8048
 <211> 420
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-015-Q1-E1-E2
 <400> 8048

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 ccatctttctg acatcccccc atctctctgc aaaactcgca caaccggctc ccaaactgcg 120
 gtatccacat ctctccggct ccaacatgga cttctccgac atctttcgca tgggtgaactt 180
 cgccgtcgcc gccttcattg ttctcggcgg tgttgcgaaa ttgttccctt tcaacgattt 240
 ctgcgacatc attcttggtg tctacctgat catcttcggc gctggcactg ctcttctcga 300
 attccagatc cctccacaga tcgctcggtt tgctcgttc atgttctctt tctcggccg 360
 cggtatcttt tacgttttta tgggttgctt aactgtcggc tctggctggg atcgctacat 420

<210> 8049
 <211> 370
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-015-Q1-E1-G5

<400> 8049

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gtagagcttg tacagcttcc tgtagatcca atgactggat tgtgcaaagg ttatgggttt 120
attcagtttg cacggcttga agatgcaaaa gctgcacaga gcttgaatgg gcagcttgat 180
atcgctggca gagttattaa gggttcaagc tgttacgata atgtgggaat gcaagctagt 240
ggagcaacta ctggagaatt agatgacgat gaagggtgaa gcttggcact aaatgcaagt 300
tccagagctg ctctaattgt caaattggac aggagtggta ctgcgaacag cttaactggt 360
ggtattggtg 370

<210> 8050

<211> 354

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-H1

<400> 8050

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ctcctcccc tccgcctgat tcatccaaga caaggattgc caagtccgac tcggaggaac 120
aacacttcga atccaaagcc caagcctggg cgtccaagac ctacccgcag caggctggca 180
ccgtccgtaa gaacggcttc atcgatcatc agaaacgtcc ctgcaagggt gtggaggttt 240
ctacctcaa gactggtaag catggccacg ccaaatgcca ctttgctgcc atagacatat 300
tcaatgggaa aaagcttgaa gatattgttc cttcatcaca caactgtgac attc 354

<210> 8051

<211> 344

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-H6

<400> 8051

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cagcgcggcg gcggcgacca tggtgtcgg aaagaacaag aggatctcca agggaaagaa 120
gggtggcaag aaaaagaccg tcgaccttt ctctaagaag gattggtatg acatcaaggc 180

accgtcgggtg ttcagtgtgc gcaacatcgg gaagactctc gtatccagga cacagggtag 240
caggattgct tctgagggtc tgaagcacag agtctttgag gtttgcctag ctgatcttca 300
aggcgacgaa gatcaagctt acaggaaaat caggctccgt gctg 344

<210> 8052

<211> 265

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-015-Q1-E1-H7

<400> 8052

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gtccgcccac gcgtccgggg agcaatacca tagcccccg aaactgctgc tcgcatgat 120
cgctgaagtc cgagagctgt caaagctgtt catgtggaaa ggggaggtgc tcacgggcct 180
cacggactga gacgatgagg gcaacgagca tctcgactat gagctctccg acgtgctgct 240
ctatctggac cgctctccg acatg 265

<210> 8053

<211> 445

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-A4

<400> 8053

ggctctaaat taccgggtcc acccagcgt ccggcagcca gctacactgt gccaaaccgt 60
gctctctggc aggcattcatt tgatgctttc tttgggcttc taacaaaata ctgtgtcagt 120
aagtttgaaa gtatccaaca gatgtttgtc acacagacac cgagctcagg aatcggacct 180
gaggcttcca aagctactag taaggagatg cctgttgagc tacttcgtgc aagccttcct 240
catacaaacg agcagcagcg ccagcggctt cttgatcttg ctcagagatc catgccagta 300
acaggtttca atccctcagg tgctagaggt gggcacatca cttcagaatc tgttcttgga 360
tgatgtaact gaaggagaca cacaagggca aagagtcaat gcttttaaac attgatgaga 420
tgggtctcag ctgataattg ttgta 445

<210> 8054

<211> 233
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-016-Q1-E1-A7

 <400> 8054

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 agaaggaaga gagattaatt cagcagcagc ttttataaat tctttgttgt catgaagcag 120
 gtggttcttt tgtagtgtat gaaagggatt tgtcgtcgct atcgtttaca taattcagac 180
 aataatttta tattgtgtaa ttctgagaat caaagcactg tttgtgttat agc 233

<210> 8055
 <211> 395
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-016-Q1-E1-B1

 <400> 8055

 ggtcgacgca cgcgtccgac cacgcgtccg cccacgcgtc cgcccacgcy tccgcacaca 60
 tgcatagttt cttctactac acgacgacaa acatggggaa gcctgcgaag atcggagagt 120
 ggggtggata cgccggcgat cgtcgggatac tgaggggtac tccggaccgg ctgatcgagg 180
 tgaaggtcac ggcggacaa acgagctgca tccgctccat ctccttcac tacatcggag 240
 ccgatggcaa accgtacgaa gaggggcat ggggtttcgg ccacgctggc acggagtaca 300
 agattgatct gtgcaggttc gacgagagct tgacggagat ctccgggacc acgggcccag 360
 cctacaacat tgacaatctg gtcaagtctc ccaaa 395

<210> 8056
 <211> 400
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-016-Q1-E1-B2

 <400> 8056

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 tcagatcgta gcagccaagg attccgcgct ccgggggtgc catgaagctg aagctcctct 120

ctccctgcct tctcctcctc gccttctttg ccaccgcggc gtacgcggcg tcggggtcgc 180
gcgcggcggc cgtcgtcagg ggcgcgggcg ccctgtcgca gtcggagttg gagttcggac 240
cggagaacca gtgcgtgtac acggtgtacg tgcggacggg gtccatctgg aagggcggca 300
cggactcgac catcggcggtg acgctgctgg gcgccgaccg cacgggcatc gggatccggg 360
acctggccgg gtggggccgc ctcatgggcg ccgggcacga 400

<210> 8057

<211> 302

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-B3

<400> 8057

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ccaatctcat cgtcccacgg gctggcctcc acgccggcgc caatctccac gacgacgtgc 120
cggccggccg tcttggcgac agccgcggcc cagaagagga gcctgctgcc ggcgactgcc 180
tccgagacga ggggagtcgc gccggtgagg tccagcggga tcgagacgag cacggtgggt 240
ctgggatgtg aggccgtcac cgggcaggtc acggagggtca acaaggacac cttctggccc 300
at 302

<210> 8058

<211> 471

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-B4

<400> 8058

gtgcggtcgt aaattcacgg gtcgcagcac gcgtccgacc acgcgtccga atattttgag 60
cattcagaaa cacaccaagc gaagcacatt agcaacaacc taacaacaat ggctaccaag 120
atattatccc tcttgcgct tcttgcgctt tttgcgagcg caacaaatgc gttcagtatt 180
ccacaatgct cacttgcctc aagttccatt attacacagt tctcccacc agttacttca 240
atgggcttcg aacaccacgc tgtgcaagcc tataggctac aacaagcaat tgcggcgagc 300
gtcttacaac aaccaatttc ccagttgcaa caacaatcct tggcacatct aacaatacaa 360

accatcgcaa cgcaacagca acaacaattc ctaccagcac tgagccacct agccatggtg 420
aaccctgccg cctacttgca acagcagttg cttgcatcaa acccacttgc t 471

<210> 8059
<211> 424
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-016-Q1-E1-B8
<400> 8059

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cgcgctggggc acaaccccg cggaaggag cggtacgagc gcgagttccg cgagctcgca 120
aagggcgccg gcttctccg gttcaaggcc agggacatct acgccaacgc ctgggccatc 180
gagttcatca agtgaaccac cgtcgccgcg atgagatggc atggctgcca catgctttgc 240
ttgcttggtc ctcgatcgt acgtcgccgt cgtcgtcttc ttctggttat tgcgctgcta 300
cctcgctgct ctgcgcatg catgtacttt tgcctaactt tctttcttca taacatgcac 360
tctggctggc ctagactgcc cccgattcat ggtggccggt acgtcttgte gagctcttgc 420
atgt 424

<210> 8060
<211> 338
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-016-Q1-E1-C1
<400> 8060

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tgagagacaca gcagcttctc ctccagatcg ctgggcacaa ggatattctt gaaggcgatc 120
cattcctgaa gcaggggctg gtgctgcgca accctacat caccacctg aacgtgttcc 180
aggcctacac gctgaagcgg ataagggacc ccaacttcaa ggtgacgccc cagccgccgc 240
tgtccaagga gttcgccgac gagaacaagc ccgccggact ggtcaagctg aaccggcgga 300
gcgagtaccc gcccggcctg gaagacacgc tcctcttc 338

<210> 8061

<211> 292
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-C2

<400> 8061

cgcacgcgtc cgaacacaac gagaaatgat agcgtcctga tcgtcgccct catcggcacc 60
caacaccgcc tcgggcacat gattcggcac cttgacgata ggaagggagc tgcactcgcc 120
atgtacgtcc ctcttctgcg caactccgcg gtcgacactc ttcatacaggc ccaagcctga 180
acgtgttagc catagccgcg atcgacata cagcgtcacc tcccaccttg cgggtgtcgca 240
cgatctcccc caaggtcaga ggcctcaaca tctggaaaga cttaaccag ct 292

<210> 8062
<211> 385
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-C3

<400> 8062

gggtcgacgc acgcgtccgt tccaagttaa cgtctgagaa tgcatacttg ctgaagcgac 60
tggtctgatat gactcagaaa tacaaggacg cttccgttga caataaaaat ctaacagttg 120
atgttgagac tatgaggaga aaggttcgtt cgtcttgaat gcatcacaga cctttttctt 180
ctttttgttg tacgagagct cttaactgca tccatttatc gatcataaca tttttactgg 240
gctctgcgta tactcaccgt aatcaacgtt tacatctctc tagatggctg caaagggcag 300
tgaaagtaat atgattgctc atagttctta ttttagaacc tgcaagtaca gtttttagttt 360
ccaatggttt ttaactgcac ccaaa 385

<210> 8063
<211> 424
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-016-Q1-E1-D1

<400> 8063

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atccggtggtt tgctgccatc aaatcaaagg tcacagataa cctgaccaag catgcttctc 120
 ctgagacccg atctacacca ggtcaaccat gggttagagg atgggacgac ataaagaaag 180
 gcaaagatgg acccaagtat ggaaatcagt gataagctgc ttgaaatggg gatgacggct 240
 ttccatccta aataatagct gtccgcccac cccaccccc aatatgcttg ttttgtgatt 300
 gtgtagaata nagtgaactg ccaccggcat gtgtgaagtt tgttaaattg tagaatcagc 360
 ttgtaactat ggatgggtact cctgatgttt gcctggcaat tccagccttc caggtatcgt 420
 ctaa 424

<210> 8064
 <211> 402
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-016-Q1-E1-D2
 <400> 8064

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 ggagtcgccg cttcactgta gactggccac tagttgttca cagcccgagc gtggctggat 120
 tctagaaatt ggaaacccca ctaccttggt gtcattgctgt gtgacacacg tagtaciaaag 180
 gtcgtcttga acaacatgac tgcacatgca gcagagagga tatttcgtga cctgaaaatg 240
 tcagcatctg ctgtttctgta ctgtgcctca ttggcggtta cagtgcatag gtatttgaca 300
 tgcataaatg accgtgcaag tatttgactt agactgacga agacttgtac gacggcattt 360
 catttaggaa aataagaaac tccaaacaga gttgaaggaa aa 402

<210> 8065
 <211> 433
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-016-Q1-E1-D3
 <400> 8065

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 gcttagcttt gtattatatg atggatacac cattataaaa ggtccctctg cttgaaagat 120

ttgtaaatgg agatgatgca ttcagaaatt caagggttcaa gctcattcct tacatctcaa 180
 agggatcttg gattgttaaa cagagtgtgg gcaagaaagc ttgcttggtt ggacaagcat 240
 tagaaatcaa ttattttcgt ggaagaaact atttggagct tggagttgat attggttcat 300
 caaccgtggc acgaggtgtg gtgagcctag tgcttggcta cttgaacaat cttgtgatcg 360
 aaatggcctt tcttgtacan ggaaacacat ataaagaact ccggaattcc tcctaagtac 420
 ctgccgactg aat 433

<210> 8066

<211> 460

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-E4

<400> 8066

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 ggagatcatg tgtggacagc agggagcact gcctatgggtt gagaagttga catgccgtgc 120
 cagcatgggg aagtatgttg ccttcgccag gagcagcatg cctttcgacg atggcagcgt 180
 ggtgaatcct gctgctgttg ctgaggcaga attgccagta attctacctt tggacattgg 240
 ctggcccgtg aacatgcctt gcctccgggg catcacctat ttgctggact accaggactg 300
 cagtgccaaag gagtgggctc atgtggagac attgctcatg cacgtgagaa aaatccaccc 360
 caactgtcca cccttccgaa tcaaaaagaa ccgcagagac aaggagatta ctatgatcga 420
 cgcaatcatc taccttgaag atgtcaagga tgtgttcaag 460

<210> 8067

<211> 321

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-E5

<400> 8067

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 ttggatccta gatgatgttg ttcagggtga gaattgagat aatcagaagg aatgtatagc 120
 ttctgctagt agttttccaa gtcaggaggt tgtctataac tttgatttct gcaactgaat 180

cccaagtgtg gaactgcaaa ttgctgaaaa gtttagactg ttttaagggtgg ttatataaat 240
 tgctgccctg caagtttctg caaagcaatt aaggccttctg tcctccttcg aaatatggga 300
 attttatggt ttgtgaaaaa t 321

<210> 8068

<211> 272

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-F1

<400> 8068

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 gcttctgtat gtcagttgtc ttcgcatgca tatgggcgtt tataacgtgc tagctcgtgt 180
 cgtacgtaca cgtgtatgca cgcattggtgc accacacatg aatgggtgtcg tcaccaata 240
 tcacccacg tttcttttaa aaaaaaaga at 272

<210> 8069

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-F3

<400> 8069

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 cgaagatcgg agagtggggt ggatacgccg gcgatcgtcg ggatctgagg gctactccg 120
 accggctgat cgaggtgaag gtcacggggg acaacagcag ctgcacccgc tccatctcct 180
 tcactacat cggagccgat ggcaaaccgt acgatgagg gccatggggt ttcggccacg 240
 ctggcacgga gtacaagatt gatctgtgca cgttcgacga gagcttgacg gagatctccg 300
 ggaccacggg ccagcctac aacattgaca atctggtaa atctctcaca atcgccacca 360
 acaaacgcgc tta 373

<210> 8070

<211> 57

<212> DNA

<213> Zea mays
 <223> Clone ID: LIB189-016-Q1-E1-F4
 <400> 8070
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<210> 8071
 <211> 257
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-016-Q1-E1-F6
 <400> 8071
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 aaaaagaaaa ggaaaaaaaa aaaaaaaaat aaaaagatta catacacatc aataaaaaga 120
 taaaaattct tcgagatggc cacaaaactt taaattcatt gtcgtgagtt attaaaactt 180
 tgtgactgga aataccctgt cgtagccat cttaatctcc ttgcattact tacccttttc 240
 gctatccagc gtaatat 257

<210> 8072
 <211> 449
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-016-Q1-E1-F8
 <400> 8072
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 ttcaacaaaa gacagaaaca aatccactat tggttttacg tcaagcaata cgtagagtaa 120
 ctcccaatat aggagtaaaa acaagacgta ataaaaaagg atcgacgcgg aaagctccga 180
 ttgaaatagg atctaaacaa ggaagagcac ttgccattcg ttggttatta gaagcatccc 240
 aaaagcgtcc gggtcgaaat atggctttca aattaagtcc cgaattagta gatgctgcca 300
 aagggagtgg gggtgccata cgcaaaaagg aagcgactca tagaatggca gaggcaata 360
 gagctcttgc acattttcgt taatccatga acagaatcta ggtatgtaga cacatggatc 420
 catacatctc gatcggaaaa gaatcaata 449

<210> 8073
<211> 239
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-G1

<400> 8073

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ctgacaatcc tctattgaca aatgccaaatt tatgtcgcgc aaccaatagc gatataagcg 120
aaaaataagc cctgaaaccg gaccaggcta aatgtgaatt ctgccgaacg atagggacga 180
aacagaaatt taagaagtaa tatacgctc agttcgttag cctgtgccaa agatcacag 239

<210> 8074
<211> 181
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-G2

<400> 8074

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taaggcccggt tattttttttt attgaaagtg taactttcta aattaggtcc tgttggtttg 120
cgttggattg cgtccggaat cgtttcaagg tttatataaa ttagagaagc aatccggtta 180
g 181

<210> 8075
<211> 446
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-016-Q1-E1-G4

<400> 8075

cgtccgacca tagatgtgta tcttgctgga acggatcatgt tgatatttgg gatgggtctc 60
tacggtcctt tcgtcagcaa cccttcctg ggtgttcgtc ctgaatccga ccgtgcactg 120
agcggatcgt tgctgttcgg gatgttcgct ttgaaggaac gcccgaagtg gatgaagatc 180
acctccctcg acgagctgaa gacaatagtg gggcacgtca tcgtgatgat cctgctggtg 240

aagatgttcg agaggagcaa gatggtgaca atcgccacgg ggctggacct cctcagctac 300
 tcgatctgca tcttcttgct gtctgcctct ctctacatcc tgcataacct ccacaagggc 360
 gacgaccatg aggagtgagg agagtgcaat aatataatgc ccaatctgta actctatgac 420
 agaagagata atggtaaggc ttgggt 446

<210> 8076
 <211> 378
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-016-Q1-E1-H2
 <400> 8076

ggtcgacgca cgcgtccgac cagagtcgg cagctcccc cgcaaaaacc ctagctttac 60
 ctccccacaa gcgcctccaa gatgaagctc gtcaggttct tgatgaagct gaacaacgaa 120
 acggtgacca tcgagcttaa gaacggcacc gtcgtacagn gaaccattac cgggtgttgac 180
 atcagcatga atactcatct gaagactgtg aagctgacac taaaagggaa aaatcctgtt 240
 acccttgatc accttagtgt gaggggaaac aacatccgct attatatcct tcttgacagc 300
 ctaaacctgg agactttgct ggttgaggaa acaccaaggg tcaagcctaa gaagcctact 360
 tctgggaagc ccttgggc 378

<210> 8077
 <211> 305
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-016-Q1-E1-H6
 <400> 8077

cgggtcgacc cagcagctcc gccacgcgt ccggcaggag ctggctctac ccatttttct 60
 ggtggtgtaa ggtttcattg caaccggacc aaggattacg taatggtagc aggtagcatg 120
 atacaagtga aaacgatggc tgttttttta aatagggaga gtctcgctct ccagctgtgg 180
 tgaagattgt atatatgctc gtgttgccctt attaataatt attattgtgc ggttgcttct 240
 tgaggaaaaa aacaacaaaa agaaacaaag ttcataaata aaaaacggga agcttatcaa 300
 caagc 305

<210> 8078
 <211> 397
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-A10

<400> 8078

ggctctagaat taccggggccg acgcacgcgt ccgcgcctcc gcttgggtctc gctctcgctg 60
 cattcgtctt ccccgcccggt ccgtccgccc gctgatctca gatccagacc aaacgaactc 120
 cacactaccc tctgccagc tcgcgcacgc atgaaaccct agtgaccccg tccagatctc 180
 ggcgctccga tcaactgcgcg gcgcgcgcat ggcgcccccc gcgctggact ctctcccggc 240
 gccgctccgg tcgctgcggc tcaagacgaa gcagcaggag ctcttgcctc gcgtctcggc 300
 gctggcgctc atctaogtgc tcgccttcgc cgccgcctc ttctccgtcc tccgctacga 360
 gtccatgatc cacgagttcg acccttactt caactac 397

<210> 8079
 <211> 371
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-A11

<400> 8079

tccggggccga cccacgcgtc gaggaagca aacgcctcct tgagatgggt tataaaaacc 60
 ctgtttcttct gctccatcca ctgggaggat tcacaaaagc agatgatgtg cctcttagtt 120
 ggagaatgaa gcaacatgag aaggttcttg aggaaggtgt cctcaaccga gaatcaactg 180
 ttgttgcat ctccccctct cctatgcatt atgctgggccc aactgaggtt caatggcatg 240
 ctaaggctcg tattaatgct ggcgcaaatt tctatatcgt tggaagggat cctgctggta 300
 tgagccaccc cacagagaaa agggacctct atgatgctga tcacggaaag aaggttttga 360
 gcatggctcc t 371

<210> 8080
 <211> 425
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-A12

<400> 8080

gctgccaggc cggtaagaa ttagcgggtc gagcacgcgt ccggacttcg tgcacctctt 60
gctgtcgtcg cagaaagact acggtctcac cacggataac atcaaggga tacttgtgaa 120
catgttcgaa gcagccatcg agacatcatt cctgggtgctg gagtactcca tgagcgagct 180
gatgaacaac cgccacgtcc tggccaagct ccagaaggag gtgaggacgg cgacgcccga 240
cggccgcatg gtgatggagg aggacctgag ccggatgcca tacctgaagg ccaccatcaa 300
ggagtccatg cgcattccacc cgccggcgcc gttccctcct gccgcacttc tccaccacg 360
actgcgagat caacggctac accatccccg ccggcacgcg cgtcatcgtc aacgcgtggg 420
cgctc 425

<210> 8081

<211> 295

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-A7

<400> 8081

cccacgcgtc cgcccacgcg tccgagccct gctaccttct tgatacaacc acagttgttg 60
ccgttctacc agcacgctgc gcctaacgct ggcacctct tacaactgca acaattgctg 120
ccattcaacc aacttgcttt gacaaacca gcagcgttct accaacaacc catcattggt 180
ggtgccctct tttagatttc ttatgagtta tagttcaata ataaagtttt ttgtctgatg 240
tttgtggctt ccagaaata agaaagtaca tttctagatt aaaaaaaaaa agaaa 295

<210> 8082

<211> 74

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-A9

<400> 8082

cccacgcgtc cgcccacgcg tccgccacg cgtccgcca cgcgtccgcc cacgcgtccg 60
cccacgcgtc cgac 74

<210> 8083
 <211> 393
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-B10

<400> 8083

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gggtcgacgc acgcgtccaa ttacaacag tcgggaatga ttgacgttt caaccgaatc   60
ctaattctgt atatcaaact gagcacctct catactttta atttgctgga cgagtgggtg  120
gcaaagctct cttcgatggg cagcttttag atgctcattt tactagatct ttctacaaac  180
acatacttgg tgtcagggtt acgtaccatg acattgaagc tatcgatcct gcatactaca  240
agaatttgaa atggatgctc gagaatgaca taagtgatgt ttggatctc accttcagca  300
tggtatgcaga cgaagagaaa ctgatattgt acgagaaggc agaggtcact gattgtgagt  360
tgattcctga agggcgtaac atcagggtta ctg                                     393
  
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<210> 8084
 <211> 397
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-B11

<400> 8084

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ggtcgagcca cgcgtccgcg gacacgtggg cggacgcgtg ggcccacgcg tccgcggacg   60
cgtgggagag gacgaggcca agaggtacga gcaggagatg atggagttcg ggacggcgtc  120
gccggagtac gtgatcgteg cggccgtcgc gctgctcaac ctcggtgtgc tggcagggat  180
ggcggcggca ctggatgtgt tcttcgtcca ggtcgctctc tgcgggggtgc tgggtgctct  240
caacgtcccc gtctatgaag ccatgttcgt caggaaggac agggggagga tgccgttccc  300
gatcacgcta gcctccgttg gctttgtgac gctggccctc attgtgccat tcttttgact  360
ttgagggtgc aataatacgt gtacgggcac acgcacg                                     397
  
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<210> 8085
 <211> 390
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-017-Q1-E1-B2

<400> 8085

gacccacgcg tccaccacg cgctccggccg acttcttcgt cggcgacgcc gactcgccca 60
acaactaccc caacggcggc ctctctacg tccgctctc gcccgccacg gtgggcttct 120
accgccactg gcaggcgctc gcgcgcgggt tcccgggcca ccacgagcag tacgtcttcg 180
acaggatcgt caaggaaggg tacgccggcg cccgggtgca gttcctggac acggccgtct 240
tcgggggctt ctgccagcac ggcgacgacc tgngcagggt ggccaccatg cagccaact 300
gctgcgtggg gctggacaac aagctcttcg acctcaagaa cgtgctacag gactggaaga 360
cctacagagc gcgcgccgcc gctggcaacg 390

<210> 8086
<211> 253
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-B3

<400> 8086

aaaggctctg ttaataatgc catcttacta gtttaattgg tattaactca aagtctcaaa 60
cgtgcctctt gttgcattga cacacatgta caatacaatc gtacatatag tacgttttat 120
tcgacaagca gcctctgcat gcaataatag tacaaccccc gatttaatta attggactaa 180
tgcatgctga ggatggatca gatggaaatg ctgctgggga tgccccctcc ggtgactccc 240
ggcttggaag aag 253

<210> 8087
<211> 388
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-B5

<400> 8087

gggccgaccc acgcgtccac cgactgctcg aaagcgcagt cactggccat tccatgccca 60
cgactgcagt gcctactacc ggaccgggat gccgggggtc accgccgat ctcgctctgt 120

ctagctcaat agccatgggt cacagcgccc cgaagcgact gggcgatatc aagccgtcgt 180
ggatcggttcg cactgagtca aacgtgagga tggagagagc aaaacgacct gatcctcctt 240
gcaccatctg caaaggctca gggataatat actgccgcaa ctgcttttggc cgacgaagaa 300
cataccatgc cgatgtggcc atgcgtccga actgtgaatg gccacaatgg tgtcaaattt 360
gtggtggtac tggactggat tactgcct 388

<210> 8088

<211> 208

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-C12

<400> 8088

accacgcgt ccgccacgc gtccgtgggt tatctagtgt ctctgccatt gccatggat 60
ggtactgtct ttcaaagtat ttgtatgggt tgtgtcgtga gtcgtgactg agctggtttc 120
atggaccagt tgtgttctcg ttacccaaaa ctatcgtgcg accgcatatg gcttaatcat 180
gaataaatgt tgtgtttgaa tttaaaaa 208

<210> 8089

<211> 85

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-C2

<400> 8089

agaaaaaaaa aaaaaaaaaag aaaaaataaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaaaaaa aaaaaaaaaac aaaat 85

<210> 8090

<211> 365

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-D10

<400> 8090

gcgtccggtg tggcgagtgt gaacttatcg gcacatgcat actggacccc agatccaact 60

ttcagaagct atttaaacta cggagctggc attagtgagg tggaaattga tgtgctgaca 120
ggagcaacaa caattctaag gagtgcctt gtctacgatt gcgggcaaag cttgaaccct 180
gctgtcgact tgggccaggt ggaaggcgca ttcaccaag gagtaggctt ctttacaac 240
gaggagtaca caacaaactc tgaggggttg gtcacccacg atggcacatg gacgtacaag 300
atccccacag tcgacaccat cccaagcag ttgaacgttg agctgattaa cagcgcccgt 360
gacca 365

<210> 8091
<211> 365
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-017-Q1-E1-D12

<400> 8091
atcttcaca gagaggcaga cggcaggact cgcttcaagc tctcatctc gcgcaggggg 60
ggtcgcctga gatcacagcg acaatgggtga aggcagttgc tgtcctcgcc ggcaactgatg 120
tcaagggcac catcttcttt tcacaggagg gggatgggtcc gaccaccgtg actggaagta 180
tctctggcct caagccaggg ctccatgggt tccatgtgca cgcgcttggc gacaccacca 240
acggctgcat gtcgactggg ccacacttca atcctgttgg caaggagcat ggcgcaccgg 300
aagatgagga ccgccatgcc ggtgatcttg ggaatgtgac agcgggagaa gatggtgttg 360
ttaat 365

<210> 8092
<211> 423
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-017-Q1-E1-D4

<400> 8092
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cgggtgaagac caagggcaac ctgtcgagc tctctccgct ggaggtgccc cgcaccccg 120
acaacctccg gccgccgtcc aacaccggga gcggcgagtt cgaggtgacc tacctcgacg 180
acgacacgcy cgtcaccgcg ggggacaggg gggagctcag ggtgtttgtc atcgcgtgac 240

ctgatcgcgc ttgcggcgcc gttctgctgg tccgtgagat tgccatcctt cttectccct 300
gttgctccag tagatttgtt ggtttcttcg tctgaccaat gtataccgtt ctgttcttcc 360
gtgaactgaa tctgcgatta acttagtaac tatcttgtgt ggtttaaaaa aaaanaanan 420
aaa 423

<210> 8093
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-E10

<400> 8093

cgggccgagc cacgcgtcca cccacgcgtc cgccacgcg tccggcttga tctccctccg 60
ccactccatc catctcctcg ctcccagtc ccggaagca tggcgccgt caccgcccgc 120
gccccggtag cggcccttcg cccgtcgtcg gcacgcgtca agtcgtcgtc ggccttcctt 180
ggccactcta gccgcctcgg ccgcaccgcg tctccacga ggcgcagcct caaggcggat 240
gccaaaggcg agtggctccc cggccttccc tccccctct acctcgacgg cagcctggcg 300
ggtgacaatg gcttcgaccc gttgggcctg gcggatgacc ccgagaacct gcggtggttc 360
gtgcaggcgg agctggtgaa cggccggtgg gccatgcttg gccttgcccg gaatcctaac 420
cccggaggtg ctgacca 437

<210> 8094
<211> 387
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-E2

<400> 8094

gaccacgcg tccagagacg gaaagccagg tgaatccgaa gcagctcccc ttgcatttgt 60
tgatgaaaca gctcccatg taattattgg tgaagagaag aaagaggaaa atactgagaa 120
tgagaacagt caggcagccg aatctgccgt gccttccttg gcatttttag agggagagaa 180
gaaagagaat ggtggtgccc ctgaacaacc agccctgcct gtagctgaga cgaaggcaga 240
tgctcctccg gcagaggcag aaaagggggc tgaaaattca ggccagccga ataccggctc 300

tcaagaaccg aaggcagcaa actgcgacga ggggcagatt caacctgggtg cctctgctgt 360
gaggtgcaca taaggagct tgatctc 387

<210> 8095
<211> 410
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-E3

<400> 8095

ggtccagaat acccgggccg acccacgcgt ccagtcattt ttctgtctct ccctctcatc 60
gccgcgtcac gcacagccgc cgccgtcgtg cgcgtgtgcc ggaacggccg cgtggatcct 120
ccgccccgtc ccagcggcga cttgtccgtg cgaagatgct ggggttctcg accggacagc 180
tgctggtcgt cctcggggcc tgctccgtca tgatgaagcc cagtgatatg gtgaagattg 240
cgaggacggc cgggcggatg actggaagag cggttgggcg gctcatagtg gctcgccggc 300
agctggacga gattctgggc cagtctgcag ccaccaggt tcataaggag cttaaagacg 360
ctatgacaca attagactcg atccgttatg aagtccagaa cttatcaaga 410

<210> 8096
<211> 398
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-F10

<400> 8096

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atatagcagc tcataacatg ctactggcac atgcatcagc taccagactg tacagagaaa 120
aataccaagc tgtgcaaaaa ggagttgttg gtataaatat atatacaatg tggtcatacc 180
cactaacaaa ctccactgcc gatttagaag caactcaaag atttctggac ttctattccg 240
gctggatact agaaccattg gtgtttggag attatccaag cgtaatgaag aagaatgttg 300
gttctcgctt tccgtcattc agtaaagttc aatctgaagc cattcgtggc actctagatt 360
tcattggaat aaaccactat tattctttct atgtgaac 398

<210> 8097
 <211> 409
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-017-Q1-E1-F12

 <400> 8097

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 cgacaccgtc gtcgtcgctt tgctccagct tcgcctccct gcggaccgcc tccatcggcc 120
 acccccgcgg catcgcgctca tctacgcca ggaaggcggt ccaagtgagg gcatcagctc 180
 ggggtgacaa gttctcaaag agtgatatca ttgtgtcccc ttcgattctg tctgcaaact 240
 tcgccaagct tggatgatcag gtaaaagccg tggaggtggc aggatgtgac tggattcatg 300
 tcgatgtcat ggacggggcg tttgtgccaa atatcacaat tggacctttg gttgttgatg 360
 ctctgcgtcc tgtgactgat cttccattgg atgtacatct gatgattgt 409

<210> 8098
 <211> 455
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-017-Q1-E1-F2

 <400> 8098

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 gccggcgctan cggatattgc gagttacgac ggggaaggag aggaagatcc gtcgatccgc 120
 gcagattcgt ttcgatcgtg gtttggtgac ttggttaagag gggaggggag aagcggcgat 180
 gtcgggctg ttcggcaggg tgttcgggaa gtccaaggag cagagccagg cgaccgcgct 240
 ggctctgctc gacaagctca acgagacact tgaaatgttg gaaaagaagg aaaacttgct 300
 agtgaaaaag gccaatcttg aggtcgagaa ggctaagaat tttaccaaag ccaagaataa 360
 aagagccgca atacagtgt tgaagaggaa aagactatac gagcaacaga ttgagcagct 420
 tgaaaattcc agcttaggat acatgatcag atgat 455

<210> 8099
 <211> 404
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-F4

<400> 8099

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gcacattgga aatcttcccc aatttggatg gcttggccag ggacattgaa aggtcccacc 120

caccattaaa tttgtgaagg aatttcgtaa acggtacttc acccccgggt tcggtccttg 180

gttcggttgt tcacatgaaa caggaaaatt ttgacaaggt cattaatcct gtatccgttg 240

cacatttccc aaagttacaa gtaatttgat ttgcaactca agaagcttga aggtattggg 300

ttccagacat gctttcccag tgagattggg aactcaacac aagatttggg actggaaagc 360

aagatattga tgggacacaa gtgcacatcc cttgatcaga ctga 404

<210> 8100

<211> 406

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-017-Q1-E1-F9

<400> 8100

ggtctacaat taccggggccg acgcacgcgt ccacccacgc gtccgcccac gcgtccgccc 60

acgcgtccgc ccacgcgtcc ggtegaacca gggacgcgct cccttctcgg tttctttcag 120

ccacctccgc cgctgggtgga gctacgtttc tgtgcgatcc tcgtcctctg gggccggaag 180

ccagtcaagc gttgcggatg aaccagaggc tgcagaatgg gccttgcagg atttctacat 240

tttgcggaag gatgttgagt tggctcttga gcgtgtcaat gaagtcaggc agtctgccgg 300

tttgcaacag ctcgaggagg atatcgcttc gcttgagaac aagtcagtg atagttcctt 360

atgggatgat ccttccaagg cacangggat acttgtttct ctgaca 406

<210> 8101

<211> 380

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-G10

<400> 8101

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 agatttgcct cgcactggag ccgctgcgcc tccgggtcgt cacggccacc atcaccgcgc 120
 gcggcgacac tgtcttccac aactgttcg tggagacagg agaaacaggt ggcgctcggc 180
 taaaggaggc gatactggct gctctcgtc ggctcaacgt cctcgctaac gctgaccaag 240
 tcgtccatga gttactggga tgattgatgc ggtggcatct tggacagcaa cacctggtgt 300
 tgttgcgtt gtcagcactc tcgactgtcc gattcaataa tgatgtacct caggaatgtt 360
 tgaatatgat atcattgccca 380

<210> 8102
 <211> 393
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-017-Q1-E1-G11

 <400> 8102

gggccgaccc acgcgtccac ggacgcgtgg gcggacgcgt gggcggacgc gtgggccaag 60
 tcggcgctccc aggacgatct caagaaggcc taccgcaagg ctgctatcaa gaaccacccc 120
 gacaagggcg gtgaccccca gaagttcaag gagctcgcac aagcctatga ggttttgagt 180
 gatccagaga aacgtgagat ttatgatcag tatggtgaag atgcccttaa ggaangaatg 240
 ggcggtggag gatcccatgt tgatccattt gacatcttct catcattttt tggaccctct 300
 tttggacgaa gtggtggaag cagcagggga agaaggcaaa ngaggggaga agatgtagtt 360
 caccactta aagtttctct ggaagatctt tac 393

<210> 8103
 <211> 412
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-017-Q1-E1-G12

 <400> 8103

gggtcgacgc acgcgtccac ccacacgtcc ggcgttcccc tcctgcacgc aacctcatct 60
 cgtcctccag atccaggatg gccgtcctcc ttgagacctt gcctccccga gtgctctcgg 120

tgagctactt tgtttcgatt tatcaggaaa tccgtttgct tcatgttgtg caggctcata 180
 tctgattgct ggattcggca aaccgcggtt ggatcctgta tcggttagtc cttgcctgca 240
 aggttcttgt tgttttgttt tgggtggcga gcatcgcatg ttctgcttct ggatccagat 300
 ctggagaaat cgcgaagtcg tcatcggtcg gttcggagcg gatctgaggc gacgatagat 360
 ggaggctgcg ggatctctcg gtctgcagtc ctgctccacc tcgatggatg at 412

<210> 8104
 <211> 360
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-G3

<400> 8104

acaagcaaca tagaaagtgg aatccagtag caacaataga gcaaaaatga gaaaaaaaaa 60
 aaaataaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaac caaagcttcc ccggacgcgt 120
 gggctagttc aaatcccaat cggaagcgct agaaggatta agatttaggt acacgtgcat 180
 gcaaagtcaa agctcttcaa cattgtcagt gaaattcaat tcaaaggcct tggttttaca 240
 atgtcgtgat tgggaaaggc aagaccttac ccaaattaat ctcttggag cacatcccca 300
 tttccctatc gggcgtaata gtaaaaaggc ccacaccgat agccattccc aatagttgcg 360

<210> 8105
 <211> 364
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-G8

<400> 8105

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 gcagcggaga agaagaaggc gccgctcccc aagggtggta cgctcaataa agccctcaag 180
 ctggcccaga catgggtgga caaatgagt gcatcggagc cggatgaacc caacgataag 240
 gatttcgagg gccggccacc aaagctcggc cttggtgcta aagcggcacc tgggtgtgaag 300
 cgtgtggttc ccactgaccc agttgagagg aggttgcttg ggaagggtgaa tgcgcataag 360

agga

364

<210> 8106
<211> 411
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-017-Q1-E1-H11

<400> 8106

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aattttctttg ccagtttcgc tctgggttgg ctgatcacta atgggtgctgg tcttgcatct 120
taccgccattg ataccgtccg cagaaggatg atgatgacat ctgggtgaggc tgtcaagtac 180
aagagctcct tggatgcgtt ccagcagatt cttagaagg aaggggccaa gtccctgttc 240
aagggtgctg gtgctaacaat tcttcgtgcc attgctggtg ctgggtgtgct ttctggctna 300
tgacagctcc agattctctt cttccgaaaa aaagtacggt tccggcggtg ctttaaattg 360
agaaatatga tgacgaacaa gagcagtgtg tgttcccggt cttttccaat c 411

<210> 8107
<211> 203
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-H2

<400> 8107

acccacgagt ccgcatgcgt aaaatcacga gctaaatcta gcagctatag gtgcgcaccc 60
gtcctgtact taatgtttcc gagtatatgg ttagcacaca ttttgacaca cttcgtagtt 120
ataccagcat tcttggtagt aattcaaaaa tgatcacttt gattacttat tagttaaaaa 180
cagcaaagca aataataaaa agt 203

<210> 8108
<211> 410
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-017-Q1-E1-H7

<400> 8108

ggtacctagt ctataattcc cgggccgacc caccggtcca gtcctcgatc cgatccgccg 60
 agtgcacacc acctttcccc actccgatcg aatcgatggc cgccgagggc gagaagaaga 120
 tgataaccct caaaagctcc gatggcgagg agttcgagggt ggaagaggcg gtggcgatgg 180
 agtcgcagac catccgccac atgatcgagg atgactgcgc cgacaacggc atccctcttc 240
 ctaacgttaa ctccaagatc ctatccaagg taatcgagta ctgcaacaag cacgtacatg 300
 ccgccgccgc cgccgccgcc gcctcgaagg ccggttccga cgacgtgggt gccgcctccg 360
 ccaacagcac cgccgcctcc ggtgagggac tcaagaactg ggatgcggac 410

<210> 8109
 <211> 312
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-017-Q1-E1-H9

 <400> 8109

gggccgaccc acgcgtccag tcggtcggtc agccgttcgt tggcgagatt gtttgctgct 60
 ggagtcggac gtgctcgag cagtttcgct ggtccgtgac cgcgccattt gttgccacga 120
 atggttgttc ggtacgttga ggaacgatgt gtatgtagtg tgcacgtttc cggtgcatct 180
 tgttctcctc tgccctgtct gtatgtttac cccctgcac cccctcctcc ctcttttgta 240
 gagagagggt ctgtatgttc agtggaagat gattgttcta tttgattttt attttatgga 300
 aaaaaaacna ac 312

<210> 8110
 <211> 237
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-018-Q1-E1-A1

 <400> 8110

tcgcctccct tcccccttcc ctccctccct ctccccgcgg gccgccagag gcaatttcgc 60
 cctcgattcg accccgattc gtccgcccgc gaccgggatt cctccgccca agcgcggtac 120
 tgaacgctgc gctccgtgtc gccgctcgaa tccgccatga aggggggcaa atccaagggc 180

gccgcccaagg ccgatgccaa gctggcgggtg aagagcaagg gggcggagaa gcccgcc 237

<210> 8111

<211> 385

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-A10

<400> 8111

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gtcttcgaca acccacaacc tctgctctaa cctcatcgca ctgcgcgaat cgtcgtgaag 120

ccgctagccg tctgcctcgt cctcacaccc gacaagctgt cgtgctcggg gtgttttcac 180

cgtgcggcct tacgtgttcc tctcgttca tcggcttgct gcgtgttaga gcaaagctcc 240

atgatgaagt ggacatcatc gagagattgc tccagtactt gaagacccat tgggtgtggtt 300

ccacctaact ggttatctag tagaaggatt ttggatcatc tctgcaacaa aggaaaagtt 360

ttgatgtcct tggcttcac agatg 385

<210> 8112

<211> 385

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-A12

<400> 8112

gtaaggtcag gaattcccgg gccgaccac gcgtcaggag agaaacttct cttccagaag 60

ggggcaaaagc tcgcggcctc gcgtcgcgcc ggtcgttccg gtccaacgcg gcgacgcca 120

aggctgccgt ccccgggctt cctcctccc ctcgccaac cacaggaaga agcgagcagg 180

gcaccgtgtt ttctcgatcg atggcatcgg cgctgccga ttcttacggg tgcgcggcgt 240

gcagcgcgt cctggacctg tcggcgggtc acctgtaccc ggcggacttc tacttcgagg 300

ccgggaacaa cggcacgctg tctttctcgt ggggtggacga gtcgcgcctg cggttcgcgc 360

ccgaggaccg catctgcccc ttctt 385

<210> 8113

<211> 360

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-A4

<400> 8113

gagccacgcg tccacccaaa cgtccgctga ttagcctgag caatggcgaa ctctccgtca 60
ttgggtttca cacaatttag acttgcagaa ccaaattttt ggggctttac acgtcatgag 120
ggttcttgcc aaaaaatatg atttcaagtc tgaggatgag aggataccat tatttcacat 180
cgtataggac acatttcctc gtcaactaaa catttttata aaactgggtc aaattgtcaa 240
tccacgaagt gaagttgctg acttaatcaa gttgatatgt aaaatatttt ggtcttctat 300
atatttggag attcggaagc agctatttga tacaatgtc gtcaatgcat ggatggttct 360

<210> 8114

<211> 356

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-A6

<400> 8114

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ggttccttac ggttttgtga acgggccatg cgagctgttg ttgtggagta ccgttgcttc 120
atctgtcggc ttaccgcgc caccagcaac tactcccagg caaatgcctt cgcatacctaa 180
agccagatgc tcaactccaa cgtcatcaac gaccattaaa ccgggaagtc actcggatc 240
cgcaacatca acatctcctc cgatataacc aattgcgacg cattgaacca cgactgctta 300
tatgcagcat caaatacgat taccatttat ccagccagct acatcaagcc gtgctt 356

<210> 8115

<211> 105

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-A7

<400> 8115

gaccacgcg tcaacggacg cgtgggcgga cgcgtgggcg gacgcgtggg gcacgcagta 60
cgccggcaaa atgaaaaagg gctcctccgc gtcatgcact aactc 105

<210> 8116
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-B1

<400> 8116

gggtcgacgc acgcgtccag ttcaacattt ggcatataat aaccactta atatgtgttg 60
gacacttaat caccaaaata tactagaaat ggctaaggc cacatttccc ttttaggttc 120
gtggactaat tttgagggga cttggcccaa atcggtttgg tatcaatctt ttcttttctc 180
tctttttttg ttgatatttt tatgtatcaa ttcaaactcg gtttgaattt tcaattcatg 240
tttaaaggcg caaacaaaat cccaacatga gatacaattg aagttttatt tatttatatt 300
aggagaggat aaagtgtagt ctttgtcatg actcatttta atttatctat ggtttgaaaa 360
agaaatagtc tgcaaccttt cttttaatgt tccaagtttt aaattt 406

<210> 8117
<211> 181
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-B12

<400> 8117

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaggggg ggccgcccga aaggttcaag 120
cctaacttac ctttcaaggc aagtccaaac ccttccaaaa tggcccccaa attcaattcc 180
a 181

<210> 8118
<211> 358
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-B2

<400> 8118

ggccgagcca cgcgtccacc caagcgtccg cccacgcgtc cgcccacgcg tccgccacg 60

cgctccgcca cgcgtccgcc cacgcgtccg cccacgcgtc cgtccacgcg tccggccccc 120
 ttcccattcc ttgcagtacc ttcaacagtg atggttccat attgcctat gcggtttgct 180
 atgactggag ccgtggggcc taaaatcaca accctgcagc tgcaaagaca tccatctatc 240
 tccacagtcc acaggaaacc gaggtcaaag gaaagccgcg cattgcaaca ggcatgaagt 300
 gattgcattg aagggtgttc aaggaacat gatgtcatcc agcagttttg tcatgcct 358

<210> 8119
 <211> 279
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-B4

<400> 8119

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 tacatggcag gagtgcctga atttttgccc gaagcaaaag ctgtcctcta ctcccatgga 120
 ctaatgtatc tctggcaggc aatgctggtc cagcatcaaa aaatttcttt catttcgaca 180
 tttgcccatt agttgtgttc atgttcttgt taaaccctgt tgtgaatgag aaggggacgac 240
 atttacctcc ttaatatagt aaaaacatgt tcgtcaaaa 279

<210> 8120
 <211> 377
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-B5

<400> 8120

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 cctccctagg gttttgctct cggtcgtcg gatccagttc gggggatcct ccatggcgtc 120
 gcgtccgtcg ctgaagtcca agcccaaggc caagggcggg aagaaggcca ccgccgacga 180
 cgaggacgcc accgcggcgg cgaccacggt gcggctcatg aaggagtgga ccacgtggac 240
 gatgaagaag gcgaaggtgg tggcgacta cggcttcac cccctcgtca tcgtcatcgg 300
 catgaactcc gagcccaagc cctccgtgtt ccagctctc tccccgtct gatcggtatc 360
 ccccgtcagg gcccgga 377

<210> 8121
 <211> 408
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-B6

<400> 8121

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attccccgggc cgaccacgc gtccaccac gcgtccgcaa tcgaccacca aactttacat 60
acaagatgaa actcgtcaga ttcctcatga aattgaacaa tgaatcggta acgatcgagt 120
tgaagaatgg tacaacagtt tctggaacga ttactggtgt cgacccttca atgaatacgc 180
atctcaaaac cgtcaagatg actgtacgaa accgggaacc gacgacactt gaaactctag 240
cgattcgcgg caacaacggt cgatacttta tcttgcccga cagtctaccg ttagatactc 300
tcttgatcga tgatgcacct aaacctaata agaagaaggc tgacgggtgct gcacgaggag 360
gagctgccgg tcgaggagcg agaggtatgg atcgtggtgg aagaaggg 408
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<210> 8122
 <211> 384
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-B7

<400> 8122

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aattccccggg ccgaccacg cgtcagccac atctccactc ccacaacaac ccgcaatacc 60
aacgacacaa tgctcggcct ccgcaccgcc gcccgcgctt cgtctgcgct ccccgttttc 120
cgcaacgccg ctgcgcgccg cttcaactcc agcgccgca agggccttga gggccctgcc 180
gacaacgcct tcaatcgcga gagggccgct gtcaagcagc acgctgctga cacttctggc 240
acctggcgca agctttccat ctacgttggtg atcccccca tcattctcgc cagtgtcaac 300
gcctacaggc tctggaccga gcaactgggag cagtcgccc agggaccagc tcttgaggac 360
aagccccgagt accccttcca gaac 384
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<210> 8123
 <211> 362
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-B8

<400> 8123

attccccgggc agaccacgc gtccgcccac gcgtccgggc cgcggcgggtt atggtggcgg 60
gcgcctgac ggcggttatg gcggcggtgg cggctacggc ggtcggcgcg aaggtggcgg 120
cggcggctac ggaggcggtg gcggctacgg cggtcggcgcg gaggtggcg gtggcggcta 180
ctgcggcggt ggcggcgcg agctggaggg actgatgtgt gggcccatcc tgacttccga 240
cgagttatct tatctatcta tagtatcgtg ttactgttcg cttctgtcac cgtgttactg 300
ctcgtactac ctttgcatta ggtgttggtg ccctgttgtc cgctttgggt gctcccgcta 360
tg 362

<210> 8124

<211> 388

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-B9

<400> 8124

ccgggccgac ccacgcgtca gcgtgttcgt ccgcgacaca gcgaatgaat tgacacgccg 60
cgcgcgagct cgctcggctg gcttgcgtgac gcgcagtttc tctctgtcct ctgcgcggcg 120
cgcaggatct ctccaacaag gtccgtgctca atgccgtcag agccttctcg ccgcgcgtgc 180
tgctccgcct gggaggggtcg ctgcaggaca aggtgggtgta cgggtacggc agcgcgggcg 240
ccgggcggcc gtgcgcggcg ttcgccagga acgcgtcgga gatgcacggc ttctcgcatg 300
gctgcctgcc cctgcgcagg tgggacgacc tcaacgcctt cttccggaga tccgggtgag 360
ctccgtccgt ccggccggcc ggcgggtt 388

<210> 8125

<211> 408

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-C1

<400> 8125

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actgccagga gggtcattta tgctttctcag ctacacagcca agccgaggct gctggaacca 120
gtttacctgg tggagatcca ggccccagaa aatgcacttg gtggcatata cgggtgttctg 180
aaccagaaga gaggacatgt attcgaggag atgcaaaggc ctggtacccc gctctacaac 240
atcaaggctt tcctccctgt catcgagtcc tttgggttct caagccagct gagggctgca 300
acctctggtc aggcgttccc ccagtgtgtg tttgaccact gggacatgat gggctcggat 360
cctttggagg ctggctccca ggctgcccag ctggtgctgg atatccgc 408

<210> 8126

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-C11

<400> 8126

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aaaaaaaaaa gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaagaaaaaa caaaa'aagaa 120
aaaaaaaaag aaaacaagaa aaaaaaaaaa aaaaaaataa aaagaaaaag gggggggccc 180
ccctgggggt tcaatctttt gatcgccgat tttcgcaggg aaaggccctc caaaagggcc 240
cccaaattta cttgcagggg cgatcttttt aaaccatctt acagggaataa cccttgatt 300
tccaatctt ccccccttta caaaaatccc cctttacctg taggggagtt acacaaacag 360
ggccactgca attcaccttg ccaaaaattt acccgccaca tggggcaact ggggtcccccc 420

<210> 8127

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-C2

<400> 8127

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tatccagcga cctctaaaaa ccacgctat taagtcagga gatgtgtata ttctcgtgg 120
tgtttcagtt cctgccttg acaaagatgt attgtgggaa tttcagccaa cgaagctagg 180
tgttggagat gtcacacag gtggagatct atacgtact gtttttgaga acacattgat 240

gcagcaccat gttgctcttc caccgggttc tatggggaaa ataagttaca ttgcaccagc 300
 tggccagtac aacctgcagg acacagtgtc agaattggaa tttcagggca taaaaaagaa 360
 atttaccatg cttcagacat ggctgtgcg ttcaccaagg cctgttgcac 410

<210> 8128

<211> 107

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-C4

<400> 8128

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aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa 107

<210> 8129

<211> 309

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-C5

<400> 8129

gccgtgtgtt gattgggata tagagagttt ttttctctc ttgatggaag tacttgggaa 60

gctatgttga tagactgaac atttttttgt aaaaaaaaaa aaaaaaaaaag aaaaaaaaaa 120

aaaaaaaaa aaaaaaaaaa aaaacaaaaa aatatgaaaa aaaaaaaaat aaaaaaaaaa 180

aaaaaaaaa gaaagaataa ggggggaccg tccaaggggt tcaatcctaa gacacgtcgg 240

catccagcgg caaacacctc atcgaagacc tcaaagcaaa gtgggacgcc gttgatgata 300

aaccaccg 309

<210> 8130

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-C7

<400> 8130

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cggtgccttc gtccccctcca tctccggtcg cgtcgccggc gagcccgaca ccgcgaatcg 120
gatccgccga caaggcgaga gggaagagat ggggctcacg ttcaccaagc tgttcagccg 180
gctgttcgcc aagaaggaga tgcggatcct gatggtggga ctgcacgccg ccggaaagac 240
caccatcctc tacaagctga agctcggcga gatcgtcacc accatcccca ccatcggatt 300
caatgttgaa actgtggagt acaagaacat cagcttcact gtctgggatg tcgggggcca 360
ggacaagatc aggccactgt ggaggcatta cttccagaac 400

<210> 8131
<211> 291
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-C9

<400> 8131
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cacctctcca ccgcctggtc ctctcggcg ctgccagca gcgcctccac caaccgtcgg 180
cgctcccccc cgcgctcggg tctctggtg aggtgttccc tccgtgagct ccgcacccgc 240
atcaactccg tcaggaacac gcagaatatc acggaggaca tgaatctggt g 291

<210> 8132
<211> 339
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-D3

<400> 8132
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tgtccagcat tgagcagaat aatgcagaat acttgcgga tgagccattg acggctgctt 120
cgctgatcaa aacacctccg tgaacacaaa catgaggcac agaagaaatg atgaaaaata 180
aaagggattg taacagtttt ggtgcctttg actgtaactg gcagagtttc tggggacaga 240
gtggcatgga ttaattgcac ctgatcactc tgtatgtcgc tgtcatgtgt gcaatgttca 300
atacgtacgt aataaagaat ggaaatatat gccgcaaaa 339

<210> 8133
 <211> 373
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-D6

<400> 8133

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gctaggtgga atactcaggt gaggttggat cagcgctggg gcctactcga cagttttaca 120
cccgtttaac ccatggttta caaagtgctc aactgggact aggggtgagct atctcttcat 180
atgattcacg attgcacaca gacaggaagg atgtgatccg ttgacatcct gaatatgggt 240
cgtcaggaaa gtcacttagt acagatctac caagtgatgg catgtatttg caatatectc 300
cacgtggatt gttgtcacga tcttggccat ctacagttga tacatcagaa tgtatcagaa 360
tcttcagagt ttt 373
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<210> 8134
 <211> 310
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-D7

<400> 8134

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tgttgagtac cgctgcttcg tcggcggcct cgctggggcc acggacgacc actccctcca 180
caacgccttc agcacctacg gcgaggtcct cgagtccaag atcatcctcg atcgggagac 240
gcagaggtcc cgctgcttcg gcttcgtcac cttctccacg gaggacgcga tgcggaacgc 300
catccagggc 310
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<210> 8135
 <211> 387
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-D8

<400> 8135

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gggcgcgcgt gctggaggag atggccgcgc agatgggtcg cctgccgtgg gcggaccggg 120
agccgtacgc gtactggaag ggcaacccca ccgtgtccgc cgagcgcgcc gacctccgcc 180
gctgcaacga ctctcgtcg tccggcggca cgcgcgtgtt ctggcaggac tggggcgccg 240
ccatccggga cggcttccgg gactccaacc tggccaagca gtgccgtac cgctacaaga 300
tctacgtgcg tggccggtcc tgatcgggtca gcctcaagta catcatcgcc tgcgactcgc 360
cggtgctgct catgccacc cccttca 387

<210> 8136

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-D9

<400> 8136

aggtaacggt ccagaattcc cgggccgacc caccgcgtcag ggcacctcac ccgatcccta 60
tgggggtgga agcatccacc tagtgtgtga tcattgcggt accagtgaca actacaccac 120
tgacgacgct gatgatggcc aattcacgtg ccgtacatgc tctgccgtgc aactacaca 180
ggcaactgct gctgatactc atgacttccc cgccactggc aacatctctg tccgtcgtgt 240
tgccaccag cccaccccca agcttgggtgc ccgcacaccc gcgccttacc tgaggacccc 300
tcaggctgct cccgtgcctg ctactgccgc ttttgatgac ttcacagagc tgagtgagcc 360
gcgggacttt gtgtctggat ctggcacgtg tggggagcct g 401

<210> 8137

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-E10

<400> 8137

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cgaagaggat ataacatgaa aatggtgtga tcattaaata tgaatgacac atattcatta 180
gcttaagcaa actccttttt ttaatgaatg acttgatata aattaaatat cttttttttt 240
gatatttttg cagtcgtttc atttaccct aatccatata gactacatcc tgtcgggtgtt 300
aaaattctaa gatcatgagt tgtaaggagg gacatatgtc acgacatgca gaaactaatc 360
caaagtgttg atttaaagct ggtgtcaacg a 391

<210> 8138
<211> 354
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-E11

<400> 8138

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ttttttctct tataggatat attttgaaca aggtgagata atggagtaag tatcaatcaa 120
attgatcaac tcaagcaaac accgcctcct acagaaaaca ttgaggagat ctacgtaact 180
ttggttttga aaatcctgca accgattcaa taattcctaa tccaggctga ctagcagctg 240
acagagttta gacatccaac atcaagaatt gtcaggacgg acataagtca tgacaagcag 300
aaaggaatcc aaagggacga ctcaaaaatt ggtgtcaacga ttaggggctg aagt 354

<210> 8139
<211> 283
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-E2

<400> 8139

cacgcgtcaa gccaaagcgtc agggcgcgct ccgtctgata tctcaccgca ggaatctcga 60
acctctctca cccatcaaca tctaccccca aacctcaacc ggctagctc cagcacttgt 120
gcactaacta tctccgtgcg gttagccacg agcatcgata ctcatataat catacatccg 180
acgtctcaca tctccaactt gccacttat gatgtaatgt ctgtccatga tgatgccata 240
taggaatcgc cattgggaac ctctcagcga atttacacga cat 283

<210> 8140

<211> 331
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-018-Q1-E1-E3

 <400> 8140

 cgggccgagc cacgcgtccg attattggag aggcaattgg agcagaagaa cagcttgagc 60
 ctcgtagaag tgcaagagtg agagagctct atgaaggaga agagtttgag tctgaagaag 120
 aagagtatga agatgaagat ttgtgctaca gtgaagatga aatatgatct ggaccatctc 180
 catctagtag tgaagccttt tgtgatgcc tggctctatg aactgcagct gtgtcacttt 240
 gtgtctgtgt gtcttctttt gtgtgagacc tgaactaaga actatgtgct tgtgttgctc 300
 tttatttata aattgtgttc tgcactaaaa a 331

<210> 8141
 <211> 382
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-018-Q1-E1-E4

 <400> 8141

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 catgaaaatg gtcaacgttc acgtcgtgtg cctggctctg tcagctgcc aacgctctgc 120
 aatgcaaatg ctctgcccct gcgcggagct gcaaggcttg tacggagctg gcgccagtct 180
 gacgaccatt attggcgccc tgggcctgta acccgaagct gagtaactga ggcaccctca 240
 gtgcaccccg ctggcagagg tgcctacta cgcagggtgt gtggcactct agcgcaatgt 300
 tccatccgct ccggcaacag tgctgccagc agcagatgag gatcacggac gtatagtccg 360
 tcacgtagca gttgcagata at 382

<210> 8142
 <211> 382
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-018-Q1-E1-E6

 <400> 8142

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gcattggatg ttgtgaaaag taagagccta gttttgactc aatcactgga tgctcacaac 120
ataactgaaa caaaagagca gcctgaagga tttgacagtg attgggttaca taccttactt 180
tggcaaggca atgaacttcc tgctcctgtc attgatgtat gcctactact gctttgagta 240
caagtggaac ttctttgcag tgagtctgca tgagaggctt gattttctttg aatcaaactg 300
ggcgttctttt gctggatttg gtgcaccatg cgtccttcga attttcttct tctctctctt 360
tataagctat gggtttctgg ct 382

<210> 8143

<211> 414

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-E8

<400> 8143

ccggggccgac ccacgcgtca gccacgcgt ccgagattct caaaatgggt ctcaagagtg 60
atatgatgtt cgataagtcc ggttttttgt cctgtcctgt cgtgaaaagt tctgaactgc 120
tagtctggcg caatgccttg gctgctactg ttgcgtcaaa gtgatattct ggctgaccgc 180
attctcttctg gctaattggc acagggtccga ttgcatcatt gagtccctca agcatcggat 240
gtgtatatcc ccaaagatgt aattatgcc tagtcgtagt tttccccct tcaataaatc 300
agttccatag taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaggg 360
aggaagcaca agaagaatca agctttaagt atccgtgcaa gcaaagtcaa aacc 414

<210> 8144

<211> 325

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-F1

<400> 8144

gggtcgagcc acgcgtccgg cgcaggactt caagacagac ctccggttcc agagccacgc 60
cgtgctggcg ctccaggagg ccgccgaggc ctacctcgtc ggtctcttcg aggacaccaa 120
cctctgcgcc atccacgcta agcgcgtcac catcatgccc aaggacatcc agctcgcccc 180

ccgcatccgt ggcgagcgcg cgtagccatc atctccggg atctgatgaa tgtctagtta 240
 ccaaacaaat aggctgtatt agcgtcgttg ttctgtattc gttattttgg attcgggtgc 300
 agtgaaaaac agctttacta atctt 325

<210> 8145
 <211> 422
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-018-Q1-E1-F12
 <400> 8145

aattcccggg cgcacccacg cgtcagaatg taagtgtctt tattgatatg aaactggaga 60
 aatacaaaaa catacgcgaa gaatcagctt tcttctatgg agagatttct gaaggaaccc 120
 tcaaatttga tagaaaagaa gcagagggtg ctgcactgag ggagctcaag aaggaagagt 180
 tggtaggctt cttcaatgat catgtcaagg tcaatgcacc acaaaagaag attcttagta 240
 tacaagtgta cggtaggtctc cattctgccg agtacgaaac catagtgcaa aatgctccgc 300
 caccgccgtc gtgtgagata actgatattt atggcttcag gaggtcgagg cctttatatg 360
 gattattcag gggaggcggtt ggtcagatga agctatagtt caacattttc tcatcattct 420
 gt 422

<210> 8146
 <211> 338
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-018-Q1-E1-F3
 <400> 8146

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 agctgttcat tctcgagget ccttctcttg tagttcgtcg accttgcgca gcagatcgag 180
 aggctgaggg gagagggatc catggagctg ggaaagcccc ttccggcgca cagatgtagc 240
 tacaccgcta cctacaccca ctgttcata ggcttctccc ctccgggtcgt ccgtaccagc 300
 tggatccgcg cggcgggtga gggcggcgac ggcggggc 338

<210> 8147
 <211> 323
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-018-Q1-E1-F5

 <400> 8147

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 tatttgttct gtagacattc tgttcctggc ttgatgttgg cgctgcacaa tgacaatggg 120
 atatgcagta ggtttgattt ttctttttct tttaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaacaac aaaaacataa 240
 aaataaacac agcaaaaaaa aaaatcacaa gaagacacaa aaaaaaaca aataagataa 300
 aaaataaaaa ggggggggctc cac 323

<210> 8148
 <211> 380
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-018-Q1-E1-F6

 <400> 8148

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 gggcggagca ggtgcagaga gggtcggaaa acgtggcaag gttggaactg gagctccaga 120
 agatccagta cgtcttgctg aagcttgagg aggagcacga gtacagaagg ctcaaagtct 180
 ctgataagcg caccctgtgtg cttttgaggg actacctgta tggaaggaag gaccgtggtg 240
 gcgggcagaa gggaaagaag aagcgggtcc cgttctgtgg ttgtgttcgt tcgaaatcaa 300
 gaacagagcc gtagcctttt tgttctcgca cccctgcgcg ttggaagagg tgaaggtgtc 360
 ctttaggatg gatccccctt 380

<210> 8149
 <211> 353
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-018-Q1-E1-F7

<400> 8149

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tccgggaatt gcactcagct taggggacaa gatcactctc aagcagaaag gtggcagtta 120
actgtgacaa gtaatcgag ttgtatcatc atttttcgca tttaggaaat ccacgtgccca 180
gagagagacc agtgccgtgg cattgaactg agtataaatg cttttttgta caaaaggatc 240
gatcaaggag agagataaga ggacagttat gaggaagtca cgaagttgtc ggtcgaagat 300
atatgttgct gtagtaacga agctgttcca aacttccttg aaatagttgt gaa 353

<210> 8150

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-G10

<400> 8150

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ggaggagcag aataccatga ctatcatcat tatgtaggag gccagagcca aagcaatttt 120
gcttctgttt tcaattactg tgattactta gatggcactg acaaaggta cagattccac 180
aaaacatacc tagcaaagct gaaggatctg gggcataatg atggccataa aggagacggc 240
agcggacca gctatgtgaa actggattag attgcaagat atagtgcac ttgagtgttt 300
ctatggcat cgacttact gtggcatttc gaaatgggat attgctgagt tgggctggtc 360
acgtgtgttc tcatttctgt agcaagcata cagctttcag ctctgccttc ctcttcctt 420
tttttttt 428

<210> 8151

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-G11

<400> 8151

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ggacaagtga ggaaaagctt gaccatttct ttccatggga gggcttgtga cgcttataga 120

aaggggagag catgtcatta gcttctgatg ggcctctgct gccaatcggg gaagcgggca 180
attgctgctg acgagtcctat tgtagctga aaacatcatc aactttggtg atcgtaactc 240
acagcaaaac aaaattatct actgtgcctt gctgcttctg gggtttggtg tagattcgcc 300
gaagtgccat atcctttatt gtttgtgtgc cagataagta ttagctgctg actgacgggtg 360
cggtgtggtt gaacataaga ttgtgt 386

<210> 8152

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-G2

<400> 8152

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agcaaaggct ctggatttgt tgctttctca actcgtgagg aagcatctca ggctttaact 120
gaaatgaatg gcaaaatgat atctggaaaa ccattgtatg ttgcatttgc gcagcgcaaa 180
gaagatagaa aagcgatggt gcaggcacag ttttctcaga tgcgccctgc tgtaccaatg 240
acacccactc tagccccgcg ccttccaatg taccctccta tggctcctca gcaactcttc 300
tatggacaag cgccacctgc tatgataccc cctcagccag gatttggttt ccagcaacaa 360
cttgttccag gcatgaggcc tgggggtcct catatgccaa a 401

<210> 8153

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-G6

<400> 8153

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accttctcgg tgctgcaggc caccaccatg gaccgcgcgg tcgggggctc gttccagatc 120
cccgcgggct cctcaccgt cttcttcgtc ggctccatcc tgctcaccgt gccgtctac 180
gaccgcctcg tgggtgccgt cgcgcgccgc gtcagcggca accgcacgg cctcaccg 240
ctgcagcgga tcgcgctgg cctcgcgtc tccgtcgtcg ccatggctgg cgcgcgctc 300

acggaggtcc gccgcctccg cgtctcgcgc gagtcctccg agtccgcctc cggaggcgtc 360
gtgcccaggt ccgtgttctg ggatcatccc catttcttcc ccccttggg 409

<210> 8154
<211> 364
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-H12

<400> 8154

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ctggtgctcc gtcttcgcgg tggttattaa gccatcagtc gttgaagctg ctgctgtatc 120
tgggttatct agtgtctctg ccattgcca tggatgggtgc tgtctttcaa agtatttgta 180
tggtttgtgt cgtgagtcgt gactgagctg gtttcatgga ccagtttgtt tctcgttacc 240
caaaactatc gtgcgatcgc atatggctta atcatgaata aatggtgttt gaatttaaac 300
taaaaaaaaa aaaaaataaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360
aaaa 364

<210> 8155
<211> 430
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-H5

<400> 8155

aagtcgggg cgcacccaca cgtcagccca cgcgtccgaa taaattaact ggtgataaat 60
attctgtaac agagatagta acacgttatt gcctagcaat atctaagatt acttttttca 120
caataaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaa aaaaaaaaaa gggggggccc ccaaagggt tcaaacttaa attccggggg 300
aaggcaatth aaaaccctt caaaggggc ccaaattca atttcagggg ggtcctttta 360
aaaacttcgg gatgggaaaa acccgggggt taccaaattt aaacccttg aaaaaaac 420
cccttttccc 430

<210> 8156
 <211> 219
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-018-Q1-E1-H9

<400> 8156

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 cgtggtgggt ggaatcacca aaaatgccct ccgtccacca ccacctcctc ctctgacgc 120
 tcgccgcctt ggccgtggcg gcagccaccg ctacgcgccg cggggacccg ctggcaatct 180
 atgcgcattt cgacgcctga tgcgcgggcc aggggaagg 219

<210> 8157
 <211> 468
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-A2

<400> 8157

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 ctcagcagct ccatttgtgt tccagagatc ttcgtcgttc tcgttccctt cgtgtgtagc 120
 ctttggtagg ttggtggaag ggcgaggcac acaagaaaat tgatagaggg gggatcccca 180
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 cgtgacggtt ttgccgcgt ctgctgcttc cctttcgggg agaagaggac tcgactcaa 300
 tcatttggtg tcgcagacgt cgcccttccc agttcagttg agagagattt ctggcatgtc 360
 cggcgcaagt aactatggat cctcatcga tgaatggttg ccgcccccta cacctagccc 420
 aagaactctc atgtctagct ttctgaatga agaattcagc tctgcgcc 468

<210> 8158
 <211> 75
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-A5

<400> 8158

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aatatttcac aaaaa 75

<210> 8159
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-A8

<400> 8159

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cactggcgac agcgccctgca cgattccggt catcgatttc cgcagcctgc tcgatccggg 180
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gttcttcagg cagccgctgg cagccacgaa ggagtgcgcg cagcaggccg gcagcatcta 360
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cttcctcatc gt 432

<210> 8160
<211> 249
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-B12

<400> 8160

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ctgctggtac ggtgggtggca tgatttgaca tgtgcatgat gatccctgtg taattttata 180
taccaagtct cgtcatatag ttacatgttc atttgcttgc ttctaaagaa agtgacatcc 240
agtcaagtt 249

<210> 8161
<211> 416
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-B3

<400> 8161

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ttgctatcaa catatgagaa cattattgtc aaagtgaag gagatgccac agtggatgct 120

gtctttgcta agatcgacga gctgctgggt tctatcctgg agaagaaaaa tgaaatggtt 180

tccagcacat gagcaaggta aaaatgattg ggtgcagtgc agatccgaca agttcatgta 240

atgcaagtca cctctcatga taggaacttc tccaggggaa tataatctgaa gcacaggacg 300

acacgtacaa gtaatgtaag ccagtctcac gtaatggaaa tttctccatg tggatgtggt 360

caaagcatag gaattttttt cctccaatta attaacggta cgcgaatgga agcgac 416

<210> 8162

<211> 87

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-B5

<400> 8162

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaa aaaaaaaaaa aaaaaaa 87

<210> 8163

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-B7

<400> 8163

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cgccgcctg atctcctcct cctgccggcg gcgtgaccc tcccagcggc gcccgccccg 180

ttgcctgcct cggcgcgagg gctgttccgc atgcccccg cgaggctggt gaaccgttac 240

tttctggtgc gcccgggcga gtccgtttac gacgggcagg gcctcctccg caggacgcc 300

gtcgctaaag acctccgtcg acagcggcct cccccccgtg gggctccgtc agactgggcg 360
cgccgcgctt cgacccc 377

<210> 8164
<211> 399
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-019-Q1-E1-C10

<400> 8164

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acccgcgcgg gttcaccctc gccgacacgc tggcctgcgg cgccgtcggc cacatcctcg 180
gcgtcggcat cgtgctcggg ctcaaagaac accggcgccc tcgaccagat catcggttag 240
atccctacgt cgtcgttggt aagatcagac tcagcagcct cgatcgcgcc gccggccggc 300
aggtgcctgc aggtgggtgac tttgtaacgt gtgtgcgtgc gtacgtgtac attgcatcca 360
tcttggttcc aatggacata tagctcctgt tgctcctct 399

<210> 8165
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-C2

<400> 8165

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gcgttgccggc ctgcgcgtg tcctgtccag actccagacc gtttgctagc ttactgaga 180
cggtagctgc cgccgttcca gcatgatcgc cacggcggac cagaacgagg tgtggtcgga 240
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ggcctgtaca tatgatcaga tggattcgcg ccttaacgct ccggtcgggt ggtctggcgt 360
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tgcaact 426

<210> 8166
 <211> 464
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-C3

<400> 8166

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tggcggaccc ggcgccacag aacgggcgca tcgtggcccc gttcgggttc gggttgggcg   180
gcaaggcgaa gcctgctccg aagaaggtag cgaagacatc gacctcctct gaccggccgc   240
tgtggttccc cggcgcctg ggcgccgact acctggacgg ctgctgggtc ggcgactacg   300
ggttcgaccc gttcgggtctc gggaagcccg tggagtacct gcagttcgag ttggactcgc   360
tggaccagaa cctggccaag aatgaggccg gcggcatcat cggcacccgg ttcgagtcct   420
ccgaagtcaa gtccaccccg ttgcagccct acagcgaggt gttc                               464
  
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<210> 8167
 <211> 280
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-C7

<400> 8167

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cccggtcgca ccacagagtc cgaccacgcg tccgcaatta aggttcagat acatccttgg   60
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agattggacg agagttcaaa ggtggtatct gtcattgtcc tgtgaaatag ttatgataat   180
tgttttcttc ttcaagaaac tatcaacatc aacggactac tgaccgtgat ctttcaagtc   240
ttatgctgga ggccgtgctg agggttttct ctctgtccag                               280
  
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<210> 8168
 <211> 418
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-D10

<400> 8168

ccggtctagg attccccgggc cgaccacgc gtcagacaga aggcacttct agatcatggg 60
aagaatatag accctgtgaa attgcaattg gaaaaggaga ggctggaaaa gaggcagcaa 120
gaagagaaaag caaggatcga ggcccaggtg aaggctgctg aagcagctgc acaacaaaag 180
tttgaggaag aaatgaggat gaagagaaaag caggaaaggg aggcagcacg cctggcacta 240
cgcatgatga agaagactgt tgatattgac aacagtgact tcctaaagga gctggagaac 300
ttcagcaaaa catggcaggc aaatccacct ggcaaattaa tcgtggattt tatcagtggg 360
gacttgccac cgggggtagg gagtccgctg gagaggctcg gcctcttcat gaaggaag 418

<210> 8169

<211> 389

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-D12

<400> 8169

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taacacaagg catcaacaca aacaacgtca cgttacaaca gttggagaca gtactacgtc 120
ctccagtcgg ctccagagat caatgttcac cagcctaata acgagttaca ctttgaaccg 180
ggtagacaca tttgtccctg ccaacataaa agaaacggaa agataactac gtgctgggca 240
gcctaagtgt gcacagcgct gtcatgtcag gttaaccacg attataagtc tcaaagcaaa 300
tgcgaggtat tgccttagac acacaagcaa cagtctccca tcggagacca agtccctta 360
tgtgcacctg acagcagatg caccaggtt 389

<210> 8170

<211> 321

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-D2

<400> 8170

ggcacaaaaa caataacccc agaagaaaac aaaatgtctg cttgaatttc aacaaaaaca 60
acaacagcgt gacctcttaa ctacacacaa aaatgtttct caagactcag gattcccatg 120

cactggacgg ggggttgaat cttcaatddd cggggggccc cttttaaata attgcggcgg 180
aaggggtatc accgcatata ggccatcggg ttggacacgg gtggcccaaa taaattdagg 240
taacaaggga atccataaac gttggccccc cccaaattdg ggattaatgg ccacgatcca 300
aaattccccc gtttaaccct a 321

<210> 8171
<211> 478
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-019-Q1-E1-D3
<400> 8171

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tgtccgtctt ggatgaatct gacgataaaa tgcaatgtgg tgtttctggc aaggatgagg 120
aagcacatgt ggaggagaaa actgtaacta ttgctgttga caaggtaaca ggaggttctg 180
caaatttcga ggatcctctt tgtgaggcat cgaggaagga acctgacatt gagaagagtc 240
acccaagcct cggagaagag gaagacgata caataggtgg aacagtcttc cctggttcag 300
gtagctgtga attatcatgt ccacaggatg gtggcatcgc agtctacgag gggcctgaga 360
tggtgtcacc agagagccaa actgatgctc ggaaagaaaa catccattca gatgtcgctg 420
agacagatga atgcaccaag actcagaagg ccgctctagc angcacagan ggagaaaa 478

<210> 8172
<211> 461
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-019-Q1-E1-E1
<400> 8172

gggtcgagca cgcgtccgac cagcagctcc ggtgctggtg gtgggtggcg tgctggcttc 60
gtccgcgtcg gggcgatca cctgcgggca ggtggggctg tcgctggcg cgtgcatccc 120
gtacgcgacg gggagggcca gcgcgtccc cgcgtcgtgc tgcagcggcg tcaagagcct 180
caacagcgcg gcgcggacca gcgcggaccg ccaggcggcg tgccgctgcc tcaagagcct 240

cgccaacagc gtcaagagcg tcaacatggg caccgtcgcc accatccccg gcaagtgcgg 300
 cgtctccgtc ggattcccca tcagcatgtc caccgactgc aacaagatca gctaagttac 360
 gacgaccaag ctaataagcc taccgaacgt acacgtacgt cccgcgcgct gcacgagtga 420
 tgaagccagg ggagaaataa aataaagccg ctgtattgcc a 461

<210> 8173
 <211> 290
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-019-Q1-E1-E2
 <400> 8173

ggtctagaat taccgggtcg acgcccgcgt ccggacagac atctgggtctc taggatgcac 60
 tctttttgct atcatgtaca atgtttcacc atttgagtat gctcttggtg aatctggagg 120
 aagtctgcaa cttgccattg taaacgggca gttgaaatgg ccaccaggac ccaaacctcc 180
 ttatcctgat gagcttcgcc attttgtaa ctggatgctt caacctgaag ctgcaatgcg 240
 ccctcaaaat tctgatgtgg gtcctcaagt tgacaagctc aatgccaaat 290

<210> 8174
 <211> 477
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-019-Q1-E1-E3
 <400> 8174

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 ctgaaggacc agcagtggtc aattctgcac ctatagcaga cgctagcacg ggatcatctc 120
 ctgccactac taggcccaga cctcagtcac cataccctaa ttatccagat ttcaagccac 180
 catcctcgcc ttgcgcgtca gcaccttaat ttggcaagag tacaagaaac cgggtctaga 240
 ggatattaaa gaagttgagt tgttcatatg gagccggcat ctcaccagag gtgcatgttg 300
 tactatgatc gtgacagtgt ggctaagtca ctgtggcgag ttttctgcag cagtaaatat 360
 atgatgtaat gttcattaat tatcaatgtg ctatgatattt ctttttgttg tcttattttc 420
 gatacatgta aatgtcgaat tactagccgt gagaattgag agttcaagcc tatagag 477

<210> 8175
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-E4

<400> 8175

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ggtcgacgca cgcgtccgag gacacgtggg tttttttttt taatataata acgaattgca 60
taaataataa taattcgtca tcaccataaa gtattactgt tgtgccaat gtccactgat 120
cacaattttc ctccccgtgc gtgagaagtt agaataggca caagctgcca ggaagagatt 180
cgaaagctcc gaatgagacc atatcacatt ggtgaatgtc taacgaggag ctgcagaatg 240
cttgagaag agcagaaatg caactgccaa agaagacaca atggaaaagg caccggaaca 300
tgtggtgcag agaaaacgtc atcaactacc gctctctaag acatgctcgc gatgttcaca 360
gacaaattca ggggcacgtc caacatctgg ggggtgatcat gtcgtcaagt ggagatgaca 420
t 421
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<210> 8176
 <211> 313
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-E9

<400> 8176

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ttccaaagta tgaatgcccg aagtcagacg acatattttg tagataattt gctatgcttt 120
gtgcacttat gtttttaggg ctttctagtt gaaccgggtgc ccctgttctg tttttaaaat 180
tgccctctatg taagaggctg tgcagtataa gtactagccc ctttgttttc tgtcgaccgc 240
attgcatggt ttggttcgaa cttttcgatg tcgtagttct atatgataat acattcagtt 300
gattttgata aaa 313
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<210> 8177
 <211> 423
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-F11

<400> 8177

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tagatatata gaaaatacta tcaatatttt cattgctgag caattttatt atggaagtat 120
attccatgat caatctagt atacctataa tacgctataa atattagtac ttctttgtat 180
atatttagtc attttagaag aagagactta attccttaaa atgagttgta aacgaaatat 240
caagtttcat atggaaataa tggccaccct ttttttaaag ggtatggcca cctaaagtgc 300
tggcctggat tacatttgcc acgtcoggat tcattcagtt tgtatggcat acagtcatag 360
aacgcggcta accatcttct tacattacac tgcagaactt tggaattgat gggaagctag 420
tgg 423

<210> 8178

<211> 210

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-F12

<400> 8178

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atcagtctaa ttagagccgg aatctgctag ggatacaact aactccatga atatctttag 120
tcaattttga cgattctact tacatcctta aaactagttg taaactaact atcatgtttc 180
ataggaaaat aatgactatc cttttttaaa 210

<210> 8179

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-019-Q1-E1-F4

<400> 8179

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ccctacacgt tccttgggtgc aagtcgctgc atcagaagcc cgccgctctc cggttaccac 120
gctgaaaacy ccgattctct tcttcacgcc tacaactttc agactcggca ggcgaagtac 180

gccaacccgtc tcaaacatac gtgatcgctt cctcgcaaat atgcccgcga ctagcggttc 240
 acgcgtagac cctcagaagt tggggaggat cacgttccag aagtcggaag acttgatcga 300
 tgaatgggac atacaatacg acgacgcaga gggatgatgt gatgctggaa cgctgaaaca 360
 ggagcccat gagcttatga gcacgaatac ccccg 395

<210> 8180
 <211> 425
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-019-Q1-E1-G11
 <400> 8180

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 cgtgaagaga aggaacgtcg gaagaaggaa aaagcggagg cacacctcta tactataatc 180
 aagggttcaa gggatgatga cttaaaagct cagataggga aagacatata ttttgatctt 240
 gttgatcatg ataaagtccc aagcttccgt atccagaaac agatgacctt tgctcaattc 300
 aaggaggagg tagcaaaaga gtttggtatt cctacacagt ttcaacgatt ttggctgtgg 360
 gccaaagcgc aaaaccatac ctaccgacct aacaggccat tgtgtcctca agacgaagca 420
 catac 425

<210> 8181
 <211> 392
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-019-Q1-E1-G2
 <400> 8181

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 tagacacggc aatgaagccc aggcctctcg gttgcgggtg cgggtgcgtc ncggcggcgg 120
 taggggtcgt cggctgggca tggaggccga ctccgaggcc gcgcggggga gggagggcag 180
 caggggtgtc gcccaagtgc tcgcactcgg cggcggcggc gggagcggta cagtcggagg 240
 accgccgcgc cgaggtgctg taccgcccgg tggagctgcc cgggacgggg tacgggtcgg 300

agctggaggc gcggatcgag aaggatcatct acgcctgccg ctcatgacc ttcttcggaa 360
 ttgtgtggtt gtcctcggc tctgtcccat gc 392

<210> 8182
 <211> 146
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-019-Q1-E1-G3
 <400> 8182

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 ataaaccatc aacctcacag ttgcggttgg gggttccatc ccggtggatg tatggtacgt 120
 tggctgggca ataagagggg gcgccc 146

<210> 8183
 <211> 84
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-019-Q1-E1-G6
 <400> 8183

cccacgcgtc cgcccacgcg tccggtcatc gtgtgtggaa ccatgacact ataaagtccg 60
 gaaaaacaaa aaaaaagaag aaag 84

<210> 8184
 <211> 436
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-019-Q1-E1-H1
 <400> 8184

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 taccaaattc aagaaacgtt ccaagaagaa aagcaagcac aagcaggcta agtctgctat 120
 tcatgaggac tctggttagac atgaaagcag ttaccatcta tcatcggact ttgacaatga 180
 gaagagaaac ataacatcaa gaagcaagag aaagaaagca aactgttctg attcatcata 240
 ttctgattcc gagatagatg ctagaaaagg caagaacaag tcaaagcata agcatatcgaa 300

gaaataccag ttagagtctt ctgattcaga atttgatgtc cgtgaagata caaggcgggc 360
tctgaagaga gaccacatga aggagaaaag agatgagtca ccattgccgt tctctaagga 420
tcaaggagac acagaa 436

<210> 8185
<211> 458
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-019-Q1-E1-H2
<400> 8185

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agaaggaccc ggcgaacgcg cagaggcaca agatcgaggc cggcgtggca acggcggcgg 120
cgctggggcg cggcggctac gcgtaccacg agcaccgcga gcagaaggag gccactacg 180
agagcaggca gcaggagcac agggtgccgc acgggcacgg gcacgggcac ggctactcct 240
actactgcga ctgaaacgac tgatcatccc atcgatcgag atatgcatgc agaactcgat 300
atatatacgg cccctagcgc cgtacacgtg cgtgcgtgta agtaaataag agcaaacgtc 360
gtcacgtgtg tgttgctcga tcactactcc atcgatctac ttantatcgt ctgcaaataa 420
cgactaagcg catgcttctg cagccgtgta cgaatcag 458

<210> 8186
<211> 98
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-019-Q1-E1-H7
<400> 8186

gaccacagag tccgacagat ggtatcccga aggggttctg cattgatgta tttgaggaag 60
ttatcagtca tccgacttcc cacgttccca acccctat 98

<210> 8187
<211> 241
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-A7

<400> 8187

gaagtcccgg ctgcacccac acgtacgccc acgcgtccgg cagaggacac tactcctcag 60
aactctccct tccctcttgt agggggccaaa agggtcagag atctaggaag aagagaacta 120
gtccccaagg ctagcaagag agcaagctct tctgcaactg ttggcattcg ccctaatttg 180
tatccatccc accggcaggc ctatctctcg agcaccctg ggcattcact ttcggcccc 240
c 241

<210> 8188

<211> 73

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-B6

<400> 8188

attccccggt cgactcacgc gtccgcgcta tgaaagaact tgatgccgtt ggtgaccaga 60
tactggagag gct 73

<210> 8189

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-C10

<400> 8189

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agctctgtgg gtatcatagc ttgcttgata accactcttt ttgcaactga tttctttgag 120
atcaaggctg tagatgaaat tgagccggct ctcaagaagc agcttataat ttccactgct 180
gtgatgactg ttggcattgc acttgctcagt tggttagggc ttccatatac attcacaatc 240
ttcaactttg gtgtgcagaa gacggtgtat aactggcaat tattcctatg cgtggcagtt 300
ggctctgtggg caggactagt tattggattt gttacggagt attacacaag caatgcatac 360
agtctctg 367

<210> 8190

<211> 300
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-020-Q1-E1-C8

 <400> 8190

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 ctctcgacagt gatgtttctt ttccggaaca agcacatcat gattgatctc gggactggaa 120
 acaacaacaa gatcaactgg gccctgaagg acaagcaaga gttcatcgac attgtggaga 180
 ccgtaaacag gggccccga aaaggccttg tccggttaat gccccaaaag aataatccaa 240
 caagtccgtg taccaagaaa gcaagcaatc cccctaagca atccaatggg gaagtttaaa 300

<210> 8191
 <211> 284
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-020-Q1-E1-C9

 <400> 8191

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 ctcgttctgt gaacgatcta ctgatagtca tccgactatg ctttttatgc ggcccatcag 120
 gtcagggtatc cccacggcca ctctgatgag acctgcgatg gcaactgctg aaccatcaac 180
 atccagtctt gttcacgctg cctgaacatc agtgacatga gattcggcag cgtcaccagt 240
 gtcaacaata gcaagggcgc cggatatcca tgctgacacg aaag 284

<210> 8192
 <211> 442
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-020-Q1-E1-D1

 <400> 8192

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 aagcaaggcg tgctgtttca gagctaaaga atccactggg gcggggtaaa caatgtggtg 120
 ttgctccaag tcatgacaat gatacactct ttgtcggcaa tatctgcaaa acatggacaa 180

aagaacattt gaaggataaa ctgaagagtt atggagttga aagttttgac gacttactac 240
 tggttgagga taaaaacaat cctgggatga atcgtggcta tgccttgctt gagttttcta 300
 ctcgacctga ggcaatggat gctttcagga tattgcagaa gagggatgta gtctttggag 360
 ttgatcgtag tgcaaaggtt tcctttgctg attcctaccc tcaagttgat gacgaaataa 420
 tggcacacgt cagaacagta tt 442

<210> 8193
 <211> 313
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-D8

<400> 8193

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 tccggggatc atcaggatac ggtggtgcct atggtggcgg tggcagcggc ggcggcggct 120
 atggtggtgg tcagagtacg agttcttggg actgaactga actctgatta gaagtgaaaa 180
 atgggccaac cttttgggcg tgaaaaatgg gtcaaccgtt atcgattagt ccctgttga 240
 tggagcgaat gcctgaaatt tgttgcttga catacgatta atcttgcggt gtgttgtgct 300
 aagggattgg cct 313

<210> 8194
 <211> 378
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-E1

<400> 8194

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 agccatcctg gaccctgatg gctggaaatt ggtcttcttc gacaacatgg acttcgccaa 180
 ggaactggag taccacgcc aacgacctcg gacgccctgc aacatgatta actcgactg 240
 ctgttggtcc gtaattaaga tgaaagctat cctagtgaat tcccaaattt tcacatgca 300
 tagaacacag gaccaccatt atatttgca cagaccctga atcaacgac ccaatcgaat 360

aacaccaggg cggccgct

378

<210> 8195

<211> 285

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-E4

<400> 8195

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atgataatga tgatatgac catggaccat gcatgggtgct ctggtcgatg ccgtacgtgt 120

gtccctgata caatactatt ttagtactga tgctagtcac catatatatc gatcgagctc 180

gccactgcga agtctgagat aatgcatgta tgcttgacgg cgagatctga ggaaaaataa 240

tttctatata tgcattgttc gagatggctc tcccttaatt aaaaa 285

<210> 8196

<211> 462

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-E8

<400> 8196

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tgaagagctg tctatgccac ttgctgctgt gaagtactcc cgtgggacgt tcattcttcc 120

tggcgcacag ccagcccccc acaggagctt ctctgaggaa gttgctgcac ttaaccgcta 180

ctttggcggc ctgaaatctg gtggtaatgc ttatgtgatt ggagatccag caagacctgg 240

acagaagtgg cagctcttct acgccactga gtaccagag caaccaatgg ttaaccttga 300

aatgtgcatg actgggtctgg acaagaagaa agcttccgct cttttcaaga ctaatgctga 360

tgggaacaca acatgtgcca aggaaatgac aaagctctct ggcattctctg aaatcatccc 420

cgagatggag atctgagatt ttgactttga accctgtggc ta 462

<210> 8197

<211> 206

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-F2

<400> 8197

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gttcccttcc gccgctgcgg tatcccccggt ccctcgctgc gtctccctgc agctcttctg 120
cgccagcggg ggagttgtcc ctggatggag gagaagatgc cgccgcatgg ccatgggtgcg 180
cgcgccacc gtggacgcgg cggcgc 206

<210> 8198

<211> 453

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-F6

<400> 8198

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ggccaccaga catcaaccgt gaaggggtgg cgtaaggca gcgctgaagc ggcggcgacg 120
tcgaggctcg agctcccggt cgcgctccg agtaacctata gatgaacata ctcgaaagga 180
tacgtggagg tggcgacagg gcggtgccca cggagcgccc cccgcgcccg gaggctggg 240
tgagatttc ggagtcgctc tcacggctct gcagcttcga cgccgccggc agcggttacc 300
gcagcatctc tgtaaaagtt attcaggatt ctagacctat acatgacaaa cttggttgat 360
tctttcttga acaaattttt cccatcagggt tatccataca gtgtgaatga aggttactta 420
acttatacca aattccgtgt gctacagcat ttc 453

<210> 8199

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-F8

<400> 8199

aattcccgcg tcgaccacg cgtacgcaga gggagaggag aaaataaata atagctacca 60
gagcatttat aagcaattca tcgagatttt gaattcattg ggcgttgaag atgttgaaac 120
ggtcggcaaa ccatttgatc ccatgcttca tgaggctatt atgagagaag aatcatcaga 180

gtttgaagag gggattattc tccaggaatt ccgaaaaggt ttcaaactcg gggaaagact 240
gcttcgcccc gcaatgggtca aagtgtctgc aggaccaggc ccctgaaaag tttggagatg 300
atgaccaaac agctgtcgaa ggtagtgtgg cacctcaaaa ggttgacgaa gtcgaagacg 360
acggtttttg tgccggcgat gcagaatagg tggctggagc ttgatctgtg aatcaacaag 420
aacagggtcca gaaattttga tg 442

<210> 8200

<211> 346

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-G1

<400> 8200

ttttaaaagt gaccgaaaat ttattccgaa gataaccaa caataatagt aggtacgtac 60
gtgacgtaga tagatagata gctagctagc tactggagga gggcttcctc cggcgccgga 120
catgggggag gtgaagcacc tgtgcctggc caagttcaag gacggcgtcg tgggtggacga 180
cgtgctcaag ggcattgacc acctcgccgc cgggatggac acggtcaagt ctttcgagtg 240
gggccaggac gtgctgaacc agaagatgct gacgcagggc ttcacgcagg tcgtctcgct 300
caccttcgcc tccgcgcgcg agctcgccgc ctacatggcc gaggac 346

<210> 8201

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-G10

<400> 8201

cccggctcga ccacgcgta cgagtacggc tagtgaagtc agccacctgc agaacacaca 60
taaggcccgt gttaaaaaaa aaaaaaaaaa aaaaaaaag ctcggcagac ctgactcagc 120
gcctccatta ctcttttcag cggcggggtc gccgcgtccg cctcgtctct gaccaacgcg 180
agggcagtca cctcgctcc agcgccaagg gtctctaccc ccgccttcgg cgctggcgca 240
gccgtcgcaa ccgcccgcgc aggcacaact agagcgagcg ggccctcgtc caatcctgca 300
acgcatcaac agattaaaaa aaaaaaaaaa aaagaaaaag aaaaaaagaa aaatcctagt 360

tagaaaaacaa ggttgaaatg aaagaaaaaa aaaaaagggg gggcccccca aa

412

<210> 8202

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-G8

<400> 8202

aggtacaggt cacggaatgt ccgggtcgac ccacgacgtc cgagaagaag acgagtgtca 60

agtgaacctg aaacttgctg tgctactggc tggatatagcc tgagtgtgag tgagtgatcg 120

agctagctga gctccgatcc tcgctagcta gctaggatac cgccatacca caagtcttct 180

tcacaagttt aggagtgaca gcaacaagag atctcgatgg cctctgccac cgtgctcaag 240

tcctccttcc ttcccaagaa gtccgaatgg ggcgccacca ggcaggccgc cgcgcccagg 300

ccgcccaccg tctccatggt cgtccgcgcc tcggcctacg ccgatgagct cgtgaagacc 360

gcgaaaacga tcgcgtcgcc ggggcggggc atc 393

<210> 8203

<211> 78

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-H1

<400> 8203

acaaaaagga taaaaactta catacacatg catgcaaacg tcataactct gggaggctgt 60

cccctaggat caattcaa 78

<210> 8204

<211> 351

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-020-Q1-E1-H10

<400> 8204

cccggtcga ccacgcgta cggttgctgg gagggttatc atgggtgtta ctgatgaaga 60

gctccagctt cttgacgcgt ttgaagacgt ggagtacacg aggacaagag ttgagatatc 120

attggctgac tcttccgaga acatgctggc tgacacttac gtgtggagtg atgcagagga 180
tctcaatctt tatggagaat gggactttga ggagtggaag aaactgcaca tgaaggattt 240
ccttgcgatg acgaacggtt tcatgcacga gctcgagcag cctgaatcga agacccgggt 300
ggagacctac caggaattca tgcaacaaca ggaacagcct gcgccgggga c 351

<210> 8205
<211> 372
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-020-Q1-E1-H12
<400> 8205

gtaacgggtca ggaattcccg gctcgaccca cgcgtaaggg tccgggcctg tcggttgctg 60
agccaccag cttcgtctcc ccaaagtggg tgccgcagct agccgacga gaggagggtg 120
tgaagggtat aaagcaggag ccaggcgtgc ggtaccgggt gctaacacct aacctcagag 180
ggttcgagggc tgccatcgca gccggcgca aggaaatcgc ggtcttcgcg tccgcgtctg 240
aatccttctc caggtccaac atcaactgca ccatcgagga gagccttgct cggtagccgc 300
gcgtcacagc ggctgccaag aaacacgggc taagcatccg ggggtacgtg tcatgtgtga 360
ttgcttgccc cg 372

<210> 8206
<211> 343
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-020-Q1-E1-H6
<400> 8206

cgggtcgacc cacgcgtacg cggacgcgtg ggcacgcgcg cagtcactca cgcacgcccc 60
cagctctctc cttctccctg ctcgctcgct cgccatggac gctccgagca gctggaagag 120
tcctgcgcgc gccaaagtac cggagaagct gcgagatcag agtagttgct tgccgctccc 180
gtgccaccaa attagattgg acgtagctag cagctagctg agccgtagtg cgtagcggca 240
gctagggtgc tagctcgatc gttatagctg cgtactagtg gtgtcgcagc agaagcagta 300
gccagcttca gtagccgac cggtggtaaa agcaactttt ttt 343

<210> 8207
 <211> 162
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-020-Q1-E1-H8

 <400> 8207

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 tccgagtcac caaatgaagt ttcaaacaga aacagcaggg ctgcggtgct gtctgctcca 120
 acaaccctta atgtgggcga tcagtttggc tttccatatt cg 162

<210> 8208
 <211> 466
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-021-Q1-E1-A11

 <400> 8208

 ttcgcggggtc caccacgcg tccgaagagg aatccttga caaccttaat ctcttctcta 60
 tcattacagt gatgtcattt ttccttttgg ccctgttac cttctttaca gaagggtgtca 120
 aaattactcc tacatTTTTG caatctgctg gtctgaatgt aaaccaagtc cttacaaggt 180
 gtcttttcgc tggactgtgt ttccatgcat accaacaggt gtcttacatg attttggcga 240
 tgggtgtctcc tgtcactcat tctgtgggca actgtgttaa acgtgttgtg gtcattgtaa 300
 catcagtgtg gttcttcagg acacctgttt ctctatcaa ctctctcggt actgcgattg 360
 cacttgccgg agttttcctg tactcacagc tcaagcgact taagcccaag ccgaagacgg 420
 cttaaataag gattgtattt tccatctctt tgtgttaatg gagtta 466

<210> 8209
 <211> 446
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-021-Q1-E1-A2

 <400> 8209

 cggtcagaa tttacgggtc gacgcacgcg tccgaccacg agtcggccca cgcgtccgat 60

atgcagtcga agatactggt atggcgagac tgaaagtttt gaagtctcgt cctgacaata 120
taacctcttt gagtcaagga agcactaaac accagctaga tggaagcaca aacagtgcag 180
ataatgttga tgacactggt attgctaggc tgggaatttt ggagtcccat cctaataatg 240
aagccctatt gggacaggaa agcagcaagc gacaactgga tgcgagaaca aatagagaag 300
atgggattga tgctgctggt atggctaggc tgagaatttt gaagtctcga cctgataatg 360
aaacctcaat gggcgaatcc aacaaggaac agcaagacc atgtggtgaa caattaaatg 420
gggatgacct tggtaatgtg tccaat 446

<210> 8210

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-A3

<400> 8210

gtcgacctca cgcgtccgag gacgcgtggg gttcgatcta tccatcgatc gctagctagc 60
tgacgaccat ggcgtccctc tcctctgccg ccataccgc cccttccttc acggccgcgc 120
cgcctcgcgc agtggtcagc aggaggtcct tcaccgtgcg tgcctctctc cgcaaggcca 180
ctgccaccgc cgccgtggcc gttgccgcca ggcctctgct tgccggcggc ggcgccatgg 240
cccaggaggt gctgctgggc gcaggcgacg gcgggctcgt cttcgagccc agccagttca 300
cogtcaaggc cggcgacacc atcaccttca agaacaacgc cggcttcccg cacaacgtcg 360
tgttcgacga agacgaggtg ccgagcggcg tcgacgcctc caacatttcg caggaggagt 420
aactcaacgc gccaggcgag acctactcc 449

<210> 8211

<211> 389

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-021-Q1-E1-A4

<400> 8211

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ggcgacctcc gcggcgtctc ctaccgcgc caatcccacc cagctctgcc ggtcccgcgc 120

ttcgcctgggc aagccggtga aggggcttgg cctgagcatg ggccgcgagc gcgcccagcg 180
gagcattgtg tgccaggcgg cgagcagcat ctccgccgac cgcgtccccg acatggagaa 240
gcggaagctg atgaacctcc tctcctcgg cgccatctcg ttgcccaccg tcggcatggt 300
cgtcccctac gggccttct tegtcnctgc cggctccggg aacgccggcg gcgggaccta 360
cgcaaggac aagctgggca acgacatca 389

<210> 8212

<211> 439

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-A9

<400> 8212

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tgttactaa cccacctcg ccccccgttc cgggtcccc tccccgtcag aaggttcccc 120
agatttatag cccggagtag cggcggcgac ggggcatgcg ctccggagccc aaaccagggtt 180
acaacgagag caaggccatc cctgattccc tgatgccttc ttccttgaga aggcctccgc 240
ggaggcggtc atggagcgag tcgagtcggt attgggagag gtattcaaca tcgtcaggca 300
gtggcaaact cagcagcaga agcagggtcca ggagttccag gcactacacg acacacactt 360
ggctccagat gagcattcat agtatttcgt cttccatgtc aattaaccta taaactcctt 420
aagaattgac gtctccaag 439

<210> 8213

<211> 387

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-021-Q1-E1-B1

<400> 8213

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cagggttcac caagctgcgg cggtagcagc agcagcagca gcacggggtc tctagtcacg 120
gtggcattcc agatcctggt gaacaacctg cccaccgcga agctcaccgt ggagtcggtg 180

gagaccgtca gcaacctgct ctctgcacc atccagaaga tcaagtctgc gctccaggcc 240
 agcatcgta cgccttagct attagcgggc atttgacatg gattccggcc gccggttctc 300
 agaaaaaagg acggagtant cggatgccat gtcaaatgct tagctagagg acgacatgct 360
 gtgacggcgc agatgctaaa caagggt 387

<210> 8214
 <211> 421
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-021-Q1-E1-B10
 <400> 8214

taccggacgt acattccccg ggccaccac gcgtccgcac acaagcactt cgacgtcaca 60
 cgggcgctgc gcacagacac accaagcgtc ggccaccaatg gcttactacc aggaggtgga 120
 ctactgctcg gaggaggtga ggtcgggtggc cccggccggc ttcggccgcc acggcggcgg 180
 cgtccagcag cacgtcgtca aggagaagtt cgaggaggtc gacacggtct cacgcgccgg 240
 cgccaaccac caccaccacc atggtcacca cggcggccac ggcttcgtgg tgcgcgagac 300
 cagggtcgaa gaggacatca acacctgcac cggcgaggtc cacgagcgca gggagagctt 360
 cctcgccaag gctaactgag ccgcccggcg gccggcatcc acgccgttc ctgcttgct 420
 g 421

<210> 8215
 <211> 364
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-021-Q1-E1-B11
 <400> 8215

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 aaggatacta aatctcgtcg ttaattgaat tcagaataga aagattcaga ataaacaaaa 120
 tttataggat tcaataatc aaataaagta aaggtaggcg ggtaataacc ttatttatga 180
 caagtttcaa attggtaaag tataccccta ggataaagaa gaagaagggg ctgagaaaac 240
 tcgcaagaaa agttccaacc gatcgtctac ttaaattcga acgggttttc aaagcacaaa 300

aacgcataca tatgtctgtt ttcaaagcac aaagagttct agatgagatt cgctggcggt 360
acta 364

<210> 8216
<211> 462
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-B3

<400> 8216

attcacgggt cgacgcacgc gtccgaccac gcagtccgag catacatcaa tgagccgatc 60
actccaaggt ttgtctatct gctagttttc aggttcgttc atgtgagttc tgcgggagtt 120
acaagacctg aaagaccggg gttagattta agcaagcagc cacctgctgt tcgattgaac 180
aaagagcttg gctccatttt aacttttaag ttgaaggag aggatttaac tcgggaaagc 240
ggatttccgt acactattgt aaggccatgt gcattaactg aggaaccagc tggagccgat 300
ctcatgtttg accaggggga caacatcaca ggaaagatat caagggaaga agttgcccg 360
atgtgtgtag cagctctggc aagcccagat gctgtgggca aaactttcga agtcaagagc 420
actgttccat tcagcgaacc gtatgtgatt gaccctgcaa at 462

<210> 8217
<211> 310
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-B4

<400> 8217

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gctaagttta attttggaaga taaaggttat ttggcatttg aacatataac atgggctcca 120
taccagacca agctgataga caccgagctt ctgaccctg ttgagatcga ctgggtgaac 180
acgtaccact cagactgccg gaagatcttg gagcctcatc tgaacgagca ggagaagcaa 240
tggctgatga aagctactga gcccgtagct gcaagaggct gagccttttc gtcaacgttg 300
caatgcaccg 310

<210> 8218

<211> 359
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-021-Q1-E1-B5

 <400> 8218

 cgggtcgacc cacacgtcca aatcagcaaa gcggcagtgc gtagagagga tcgtcgaaca 60
 gaacagcatg aagatgggtca tcgttctcgt cgtgtgcctg gctctgtcag ctgccagcgc 120
 ctctgcaatg cagatgccct gccctgcgc ggggctgcag ggcttgtagc gcgctggcgc 180
 cggcctgacg acgatgatgg gcgcggcgcg gctgtacccc tacgcggagt acctgaggca 240
 gccgcagtgc agcccgtgg cgccggcgcc ctactacgcc ggggtgtgggc agacgagcgc 300
 catgtaccag ccgctccggc aacagtgcct gcagcagcag atgaggatga tggacgtgc 359

<210> 8219
 <211> 438
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-021-Q1-E1-C11

 <400> 8219

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 catocactga tgacgataca tgcgtctgtg cttagtttac atcgaccgct tacagcaggc 120
 agccattgac attgattgat gagcacacat cgatcatgag catacgccgg ctggtgcaac 180
 tactacacgc ctacgatctg aacaagtaga gtacagagaa gaccacactg ttcactcgac 240
 ggacggacga acgaatggat ggatctgatg gtagtacaca tgtacggcgt tgctcagtca 300
 gttagtgtcc ggggacgaag ttcgtggcgt atgccaggc gttgttggcg acggggtcgg 360
 cgacgtggtc gaagaggttc tcgatggggc ccttgccggt gacgatggcc tgcacgaaga 420
 agccgaacat ggagaaca 438

<210> 8220
 <211> 361
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-021-Q1-E1-C2

<400> 8220

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actacaaacg gcggcacctc caacatagac actaaccta gcccccgctt cccaacccc 180

ttcctcccta tccaagcca tgtaacctc ttcctctcct ccttcncccg ggcgtcncg 240

ccgccgccgc cctgggcgcg cacaactccg caagcttcaa cttcgggggc ctaactaact 300

ccgaaaatga agaccgggc ccccggtgc ccgttgctcg cgctcgccaa cgccgccc 360

g 361

<210> 8221

<211> 441

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-C3

<400> 8221

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ccccctgtac cacaccactc cgcgctagct gaggacggta cagcggcaca gaggtgac 120

gtacgacgac gacgacgcag gcgccacaca tggcatccca gctctccgcc gccgtgcccc 180

ggttccacgg cctccggggc tacgccgcgc ccagggtccgc ggtggcagcg ctgccgtccg 240

tgagggtggg caagaagagg tcgtcgtcgc agggcatccg ctgcgactac atcgggtccg 300

ccaccaacct gatcatggtg acgacgacga cgctgatgct gttcgcgggg cggttcgggc 360

tgggcgccgtc cgcgaaccgc aaggcgacgg cggggctgaa gctggaggcg cgcgactccg 420

gcctgcaaac gggtgacccc g 441

<210> 8222

<211> 417

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-021-Q1-E1-C4

<400> 8222

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 accgaatcga agaaagcggc gatggcggcg gagaagccgg ctccgggtgcg cgtgctgtac 120
 tgcggcgtct gcggcctccc ggccgagtag tgcgagttcg gccccgactt ccagcgtgcg 180
 aagccctggc tgcggggcgca cgcgcccggc gtctacnccg acgacctcgt cgccgggtccc 240
 tcctcgtcgg gcggtgcggg tggcacaagg aacttgacag ggtcgggaac cctccaagg 300
 cctccggaat cccgaacggc ccagcagccc ccaggggaa gcttccgcct ccaagccga 360
 agagggtcaaa cgctgcctg gtggttaagct caagaaaaag gaaaagcaag aggttgt 417

<210> 8223
 <211> 458
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-C5

<400> 8223

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 gtgctcgtat tcagttaata cccaacatc ctccagaggg tgttacattg actgaaagaa 120
 ttgtacgtgt tactgggaat aagaagcaga ttgaagctgc aaaggatttg atcaagcaag 180
 ctatgaatca gacattttca aagcatataa atcagtctgg cggatatggt ccacaagggt 240
 accgacctca ggggtcatggt gccgcttctc agttggggcc acgctctcag aatcatggct 300
 atggataccc acctagaggt atgcctccac ctcaaaacta caacgcaccc tacgggtggct 360
 acccaccgca aggacctca agagggtggca tgggctggga acagaggccg ggcccaacaa 420
 cccatccttc gtaacaaggt ggtggtttcg actactac 458

<210> 8224
 <211> 428
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-C6

<400> 8224

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 gaggaagggg tgtggggacc gggggtgcaa gatggcggat tcacctgcaa ctacaagaaa 120

agaaagagcg agagattttac agaaaccttc agagccgcgg aggaggagaa ggagattagg 180
 aggatctcta cggcgcgtgac ggattagtta aggaacgaaa tatcacatcg tgtccggtaa 240
 ccagattcag atgtgggcac catgcgtggg tgcaggcca ggccgaggtg aaagagatga 300
 agagcgtgac caagaatttc ccgattttcc atcatttatt ccattcttac ctctctgag 360
 tgcagctaac ctaaagggtct actatgccac acgtttcacc atcatagttg ggataatggg 420
 gttcgggtg 428

<210> 8225
 <211> 462
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-021-Q1-E1-C7

<400> 8225
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 caagagctcc accacgcagc agatgggtat gcagaataga agacctacaa ctacatcagc 120
 agctectacc tatccaata ggatgtaccc tagccccga ccgtacaccc agtatgggaa 180
 ttcagtaaaa actggtcttc cctacgggag taacggttat gattccagga tatatgggtcg 240
 atgtggtctt ggtaatggta tggataacag gtacaggccc agggcatgta gtggatacta 300
 tggttatggc aatgagagtc aggatggaac aattgagtta aacagaggtc ctagatctgg 360
 ccggttcang aaccagaaat tgtacggtca tactgtcact attgctgtga aagggcagtc 420
 tctcccttct agtgaaagca agaatgatag tgctgtgcct ga 462

<210> 8226
 <211> 365
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-D1

<400> 8226
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 ggttccttac ggttttgtgg aggggcgatg gcggcggtg atgtggagta ccgttgcttc 120
 gtcggcgggc ttgcctgcgc caccagcaac gagtcgctgg agaatgcctt cgctcctac 180

ggcgagatcc tcgactccaa ggtcatcacc gaccgggaga ctgggaggtc acgcggcttc 240
 ggcttcgtta ccttctcctc cgagaactcc atgctcgacg ctatcgagaa catgaacggc 300
 aaggagctcg acggccgtaa catcacggtt taccaggccc agtcccgtgg cggtaggcgg 360
 ggcg 365

<210> 8227
 <211> 458
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-021-Q1-E1-D11
 <400> 8227

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 gccaaaacc tagcccgat cggctcgagg agcactactt cttggcatgg cgggcacccc 120
 tagccaggca agcctcctgc tccagaagca gctcaaggat cttgcgaaga accccgtgga 180
 tgggttctcc gcagggcttg tagacgatag caacgtcttc gagtggcagg tcaccatcat 240
 cggcccgccc gacaccctat atgatggagg ctacttcaat gcaataatga cctttcccca 300
 gaactatccc aacagccgc catcagtaag atttacttct gggatgtggc atccgaatgt 360
 ttatccggat gggcgtgttt gcatttctat tcttcatcca cctggggaag attccagtgg 420
 ttatgagctt gcaagcgaac ggtggacacc agtgcaca 458

<210> 8228
 <211> 447
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-021-Q1-E1-D12
 <400> 8228

ttcccgggtc caccacgcg tccgcacat tcgaagcact gtatggacgg aaatgccaga 60
 cccctctcat gtggtccaac gtgggcgaaa agcactaga aggacctgcc tttgtcaaag 120
 aggcggaaga gaaggttgca ctgatccgca gaaggttact cgaagctcag agtcggcaga 180
 agagttatgc aggcaacagg cggagggaac tccgatttga ggaaggagac ttcgtctacc 240
 tcaaggttct tccaatgctt ggtgtcagga ggttccaggt aaaagggaag ctagccccgc 300

gtttcgtaga ttcttatccc atcattggca gggtaggacc cgcagcatac cgtctggaat 360
taccggaatc catgtccgac atccacaatg tgtttcacgt atcccagctc cgcaaagcc 420
tgcaagcacc agaaagtcac atcgaag 447

<210> 8229
<211> 135
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-021-Q1-E1-D2
<400> 8229

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atggcatgag ctgctcctga gacatcgct aggcctctga ctgcgaatat accttctgat 120
gttcgacgac gtcta 135

<210> 8230
<211> 327
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-021-Q1-E1-D3
<400> 8230

ccggctgtaa attctcgggt cgacgcacgc gtccgattgc gattcgctcg ctcgatccta 60
gcttctcttc caagaagcgc agcgcccatg gccatggcca cgcaagcctc cgccgccacg 120
cgccacctgc tggccgccgc ctggcgccgc gcggcgaagc cgcggcagct gagctcgag 180
ctcgcgctgc cgtcgtctgc ctcccgcggg ccggccccgc tccgcgcgtc aaccgaggag 240
gcgggtggagg cgcctaaggg gttcgtggcc ccgcagctgg accccagcac gccgtccccg 300
atcttcggcg gcagcacggg cgggctg 327

<210> 8231
<211> 402
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-021-Q1-E1-D4

<400> 8231

gggccagaat tcacgggtcg acgcacgcgt ccgatttgag caatgcttag cagttcatga 60

taaactggag gcctcattgc gggatttgct taggacagga gacattcagt cttgcaaggc 120

agctcgtaaa gctgctgaca cgcagtttaa ggagctatcg aaagatctga agccactggt 180

ggcgactcta cagtcattct cccagttcta tcagatattg ccaaagggtan aggacttgat 240

cgtaaaggaa aaaaaaatgc aggaaaaccc aagaacaggg aatccaacct tggccaaaac 300

tttgaaaaaa aactgccccg gcaagatggt nagaacaaga ttgctttgca acagcaaaaa 360

attgccgccc tgaaggaaga aggtgaatcc cctttaaagt ac 402

<210> 8232

<211> 350

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-D6

<400> 8232

aggacgcgtg ggcggacgcg tgggcaagct cgtaacgaag ggcgcgatct tgctcgtgaa 60

ggtaatgaaa ttatcaaagc agcttgcaaa tggagtgtcg aactagccgc agcttggtgaa 120

atatggaagg agatcaaatt tgatggtttc aaagcgatgg ataccatata aaaaaaaaaa 180

acaaaaaaaa aaaaaacaaa aaacaaaaac aaccacaaa aacaacacaa acacaagaaa 240

aagaaaacca aaacaaaaaa aaaaaagggg gggcccccca aagggttcaa acctaagtta 300

cgcttgcatg caacgtcaaa gcccttcaaa aggttcccc aattcaatt 350

<210> 8233

<211> 383

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-D8

<400> 8233

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tcctaacttc ccttccaaga agcgcagcgc ccatggccat ggccacgcaa gcctccgccg 120

ccacgcgcca tctgctggcc gccgctgtg cgccggcgcc gaagccgccg cagctgacct 180

cgcagctcgc gctgccgtcg tcgtcctccc gcgggccggc cccgctccgc gcgtccaccg 240
 aggaggcggg ggacgcgccc aaggggttcg tgcccccgca gctggacccc agcacgccgt 300
 ccccgatctt ctgcggcagc acgggtgggc tgctccgcaa ggcgcacgtg gacgagttct 360
 acgtcatcac gtggacgtcc ccc 383

<210> 8234

<211> 399

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-D9

<400> 8234

ttcgcgggtc caccacgcg tccgcacacg cgtccgccc cgcgtccgga tcgtgcccat 60
 cttttgtttg atcttcatca agttgttgat ggtcttaggg aggcagagct tgggaattcc 120
 tttataggaa caacaaagag aggaattgga ccatgctatt cgaacaaggt tacaaggaat 180
 ggacttagag ttggtgacct gcgacatatg gatattcttg gtgcaaaact caacacccta 240
 ttaagagatg cagctctacg cttcaaagat tttgaatatg ataacaagat tctgaaagag 300
 gaagttgaga agtataaaaa gtttgctgaa cgattggaac ctttcatcac cgataccgtg 360
 catttcgtga atcagtcgat tttgcagaag aagaaaata 399

<210> 8235

<211> 292

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-E1

<400> 8235

cacgcgtccg ataaaaaaaa aacaaaaaca aaaaaaatc atcatcaggt taaaggttcc 60
 ttaaggtttt gtaaaaaggg caatggcaga agactgatat gaaatagggt tgccgtccta 120
 gaaggtctta ccttagttac cattaatatg tcgctgaaga atcttctagc ctccctaccga 180
 aatttacttc attggaaggc cattaataac ctggagactg ggaagactcg ggggttacgc 240
 atcttaaccg tcttgcccaa aaacccatt tccaagctg gcgaaaaaat ga 292

<210> 8236

<211> 454
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-021-Q1-E1-E10

 <400> 8236

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 gcggacgcgt gggcgcgcg cttttgact ccgtgtccgt gatcaccacc acaccgctat 120
 cctgctagct aggtagctga attcggagcc aggtcgcgag gagggggggc ggaggcgaga 180
 tggaccacgc ggcggacgcg caccggacgg acctgatgac catcacgcgg cacgtgctga 240
 acgagcagag ccggaacccc gagtcccgcg gcgacttcac catcctgctc tcccacatcg 300
 tcctcggctg caagtctgct gcctccgcgc tcaacaaggc cgggctcgcc cagctcatcg 360
 ggctcgcggc cgagaccaac gtgcaggcaa gtgcgctgta cggctagcta gtttttcctt 420
 cagagagatt gatcgagatg tgacgatgcc gctg 454

<210> 8237
 <211> 452
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-021-Q1-E1-E11

 <400> 8237

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 cgctcgtcgtc ccgccgctgc cgccagtcga ggctcgccgc gagccggcca cgtcatccac 120
 cgccgcgtcc tccgacgggg cggcctcgag cagagtccac cggtgctcca tctgccacaa 180
 ggagttcccc accggccagg cgctcggcgg gcacaagagg aagcactatg acgggggcgt 240
 cggcagcgcc gccgcgtcca ccgacgtccc ggcggcgccc gccgagacgt ccgccgaggt 300
 cgggagctcc gccgcgctg cgttcgacct caacctcccc gccgtgccgg agttcgtggt 360
 ccggtgcggc aagcccggca agatgtggga ggaggacgan gaggtgcaga gccnctcgc 420
 cttcaagaag ccccgctccc tcatgaccgc gt 452

<210> 8238
 <211> 402

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-021-Q1-E1-E2

 <400> 8238

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 ggttatgatc gcaagaatgg tgtccattca ctctgtccag ctatatggtc aaaacatagg 120
 agatggttga tgatgtcaat gatgtgtctc aatccaatag cttgttcggt tatggatttg 180
 caattcccta atgggcaact aacatatgtt gctggtgagg ggatatcagc cagtgggtttt 240
 cttccgttat ttggtgggtt gcttcaagct caaggaaaat atcctggaga aacaagaatt 300
 agcttttctt gcaagccttg gcatggaaaa gatctggtct tatggtgaga cccagtatac 360
 aagtcagtgt gtgcctacg tttggaggaa gtgacctgg gg 402

<210> 8239
 <211> 388
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-E4

<400> 8239

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 ggggaggtgg tagtggtagg gtatacagga gtgctctgcc catggagaag gcggggcaac 120
 aacgccatgt tatcggcggc ggcggcaaga aggcgccgcg cctggggctg cagaagcaga 180
 actcgtggtc gccggacatc gagcgcgacg aggcgtggga gcgccggcgc aggggcatgc 240
 gccgcggggg cacggcgctg cgccgcgccc gcagcgtcac ggacgacgac ctcgacgagc 300
 tccgccgctg catcgacctt ggcttccgct tccaaccggg gcccgccgcc gccttcgcct 360
 gcgcctgccc cggaagaaa cgctcct 388

<210> 8240
 <211> 407
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-021-Q1-E1-F10

<400> 8240

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gggacatcaa ggagaagctt gcatatatag ctcttgacta tgagcaagag ttggagactg 120
ccaagaacag ctctcagtt gaaaagagct atgagctgcc tgatggccaa gtaatcacca 180
tcggcgacga gagattcagg tgccccgagg tcctcttcca gccatccatg attggtatgg 240
aggctgctgg aatccatgag acaacatata attcantcat gaagtgtgat gtggatatca 300
ggaaggacct ctacggcaac attgtgctca gtggaggttc gactatgttc ccggtatcgc 360
tgatcggatg agcaaggaga tcacttcctt tgcaccaagc aacatga 407

<210> 8241

<211> 415

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-F2

<400> 8241

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acagaacca gtaaaatatt gctagtcccg ccgtcgagat ggccccacgc cgctgctcg 120
tcctcgccgt cgtcgccctc gcggccaccg ccgccgcggc caactccggc ttcgaggact 180
ccaacccga tccgccccgt cacggaacgc cccggcttcg gccctccagt ccaagggcct 240
ccccgcgctc gggcggaacc gcgaagcgct ccgcttcgca agccttgctg ttaggttcgg 300
gaagagctac gaaagcgcg cgagggtcca caagcggttt aggatcttcc ccgagagtct 360
ccagctcgtc cgctccacca atcggaagc cctctcctac cgctcggca tcaac 415

<210> 8242

<211> 456

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-021-Q1-E1-F3

<400> 8242

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gctaatagtt tgcactaaac tgacatccca ttttgagggtg agactgatga ggatttctct 120

gagactgtta acctcgtaaa gcaatatcaa ctccctcaat acacaacgtt ccgtaaactct 180
acaagttttg gttgttgaca ttcttttctt acatgtacat cgacaacgtg gtttttctaa 240
ggacgccctg ctgctaagat gaagaaggta tcgagcaatg aagtgaataa agcggagtcg 300
tgaactgact tcagttttcg aatcattgtc accgtaccaa ggaatggtag gcaaagtaga 360
gaggatctgg atcactgaga tcgcgaccgg tgggtgttcgc ttggttgggc aatacaaggg 420
atacatccan gtgctggtaa ttgccctgat agcatg 456

<210> 8243

<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-F6

<400> 8243

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gtctggggag cgtgactttg accgtgatcg tcagtatgag cgaagcagag gaagagatag 120
ggtttatgat tacagggaca gaggatcaga acaccgaagc aatcgctaca gaaatgggag 180
ggattctgaa agaggtggac acagatacag gagggtggt atgacaaatg accgagggag 240
aatgaggagc agatcacgtt ctccaaccag gcatggctat ggaagatcta gaagtccaga 300
tcattagctg cctagctgga catttagata gttttattca cagttgggac tcatgaggta 360
gacagttccc ttctgctatt tattactgta caatgggttt tattgaagtg tc 412

<210> 8244

<211> 295

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-F8

<400> 8244

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gccctgcttc tgctgcgaga tggaggcccc ggcgccaccag aagatggagg aggtggccgt 120
cgagcagctg ccgtcctagg caggcgacac ccggcgctct cgctttcttg tccgtccggc 180
cgcccatttg attttcggag ttgcatctat ctcatcta atggatccat ccatccatcc 240

atctaaagca gtattatgta tgcattccaca tgggtataaa tctggctgac cgcac 295

<210> 8245
<211> 493
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-G1

<400> 8245

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caaggagggc atcccacccg accagcagcg cctcatcttc gccggcaagc agctggagga 120
tgggcgcacc ctggcggatt acaacatcca gaaggagagc actctccacc tgggtgctccg 180
cctcaggggt ggcatgcaga tttttgtgaa gacattgact ggcaagacca tcaccttgga 240
ggtggagagc tctgacacca ttgacaatgt gaaggccaag atccaggaca aggagggcat 300
tccccagac cagcagcgtc tgatctttgc gggcaagcag ctggaggatg gccgcactct 360
cgcggtactac aacatccaga aggagagcac ccttcacctt gttctccgcc tcagaggtgg 420
tatgcagatt cttgtaaaga ccctgactgg aaaaaccata accctggagg ttagagctc 480
gggacacatc gac 493

<210> 8246
<211> 237
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-021-Q1-E1-G10

<400> 8246

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gttcccgggc ctggacctgc cagattctgc tgggtgaagtt gtagttttgtg gaggttctgt 120
tctacaagga cagcgtgtgc taaatatgat tgcacgattt atccaggcga aaaggcagag 180
aggatgatcat ggagtcaaag cacaagggga tggctggttg ctgactgttg ctctgat 237

<210> 8247
<211> 366
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-G12

<400> 8247

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aaaatagcta cacacagggt ctgcgttgcc ttgcattcaa agcatttttt attttattgt 120

aaagaatttg ttgttattta aacttgataa gtcttgacaa gaaagttcca atggacttca 180

aaattgtaaa aaagattaac aaccccaagt tcaattagcc tggaaataac cttaaagggtg 240

aattaccaag gttggaaaaa gttaattcaa ttttaaattt ttttcccgga caaaaaatgg 300

ttggatccga aattaattta aaatggaatt aaaaggaaaa gttgcccttg ggcaatttca 360

aattat 366

<210> 8248

<211> 497

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-G3

<400> 8248

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cacgcgtccg ggcgaccag tgaccgagat gctgttcac atccgcggca agctggaaag 120

ctccacgaca gacggtggcc ggacgggttt cttaactcg atcacctga agcccggcga 180

cttctgtggc gaggagctcc tcggatgggc gtcgtcccc aagcccaccg tcaacctgcc 240

actgtccacc cggacggtga aggcggttct cgaggtcgag gcgttcgctc tccaggccga 300

cgacctgagg ttcgtcgcca gccagttcag gcgcctccac agtaggaagc tgcagcacac 360

gttccggtac tactcccacc actggaggac ctgggcccgc tgcttcatcc agcacgcctg 420

gcgccgcctg aggaggagga agatggccaa ggacctgagt ctgagggagt ccgtctcgtc 480

cacgggaccg tacgaag 497

<210> 8249

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-G4

<400> 8249

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cagaaaaatt ttggaattca tggactgggg tgactatggg gcgaagggca ccttcattaa 120
tattggagca gtaggtgcgc agggcggtgca gatcgtgacg acggggagcg caggggagcc 180
agcgttgctt gggaagatgg gtctgccgtg ggggagtgca ggcatgctac agatgagcac 240
aggcgcgccg tggggtagag caaaccaccg tcgtcgttgc tgaatgggaa ggccgttggc 300
ccaataacg caaggcccg tctggggaag gcaagggcaa aacggggcct gttggtccga 360
ccaaaaaagg ctactgggga acttgggtacc ggtgaatccc ccggttcccc aagccaagcc 420
aca 423

<210> 8250

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-G6

<400> 8250

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ccacctccaa ggctcttggg ttagcttgcc actctcacca atcaagtttt catgtctgat 120
ctcgacattc agatcccaac tgccttcgat cccttcgctg aggccaatgc tggggactct 180
ggtgcggcag caggggtcaaa ggactacgta cacgtgcgca tccagcagcg taatggtcgc 240
aagagcctga ccaccgtcca gggattgaag aaggagttca gctacagcaa gatcctcaaa 300
gatctcaaga aagagttctg ctgcaatggg acagtgggtcc aggaccagga acttggacag 360
gtcattcagc tccaggggtga tcagaggaag aacgtctcga atttctctgt ccaggccggc 420
attgtgaaga aggagcacat caagattca 449

<210> 8251

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-G8

<400> 8251

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agcagcggta agcgccatgg cttctgtgac ggagatgttg accatcatgt cttccctttc 120

atttagtgga caggcgacca tctgaaggcc aagctgaaga tgtcatatgc tgttgcgctg 180

tcatgtcccg aacatatttg tgtttttttg ggaaagaaac atacaatttt ttgtttctcat 240

tctagtatcg tctacctatg tcaaactaca atatgatagg acccttgoga aataattggt 300

tcgtttgctg gtattttctca tctttgatgc taaaaaaaaa ggacatattg tgtaagaaag 360

ttcaagggtg cacatcacac caatat 386

<210> 8252

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-G9

<400> 8252

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gctgcgcaca gacacaccaa gcgtcggcac caatggctta ctaccaggag gtggactact 120

gctcggagga ggtgaggtcg gtggccccgg ccggcttcgg ccgccacggc ggcggcgctcc 180

agcagcacgt cgtcaaggag aagttcgagg aggtcgacac ggtctcacgc gccggcgcca 240

accaccacca ccaccatggt caccacggcg gccacggctt cgtggtgctg gagaccaggg 300

tcgaagagga catcaacacc tgcaccggcg aggtccacga gcgcagggag agcttcctcg 360

ccagggctaa ctgagccgcc cggcggccgg catccacgcc cgttcgtgct tgccctg 416

<210> 8253

<211> 443

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-H1

<400> 8253

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ggcaaagtga caaagagaag tatgagaagt ccagaaaatt gaagggtcat atacaaagaa 120

ttcgtgagaa ttatacaaaa gatttcaaaa acaaagatgt gacgaggagg caaatagctg 180
 tggcaacata ccttatcgat aaactagccc ttagggctgg caatgaaaag gacgacgatg 240
 aagctgatac tgttggttgc tgtacgctga aggttgataa tgttacatgt atgcctccaa 300
 atcagattca gtttgacttt ctgggtaaag attcaataag atactttaac accgtagagg 360
 ttgaagagct tgtgtacaac gcaattgacg gtttccgtgc tggaaagaag ccaggacaag 420
 atcatttgac aagattgata cat 443

<210> 8254

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-H11

<400> 8254

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 caactaaagg caggcgcggc acaccgac accgtaccgg cctagacact tggagaaagg 120
 agaagcagcg cagcggcatg ggcaccagtc ccgtcatccc tgcgacgatg ctcgctcgctg 180
 ctctccttgt cgctagtagt actgtctgct tcggcgccac cgccaccgac accgacaccg 240
 acggcgccat tcgtctcccc agcagctctg gtgctgttgg tcgaccgtgg gaggctgtgtg 300
 actatgtcac caaggagccg tttatcaagc cgccccggtg gcgctgcaac gacgtggtgg 360
 acaagtgtc cgccgactgc caagag 386

<210> 8255

<211> 350

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-H2

<400> 8255

ggtcgacgca cgcgtccaac ggtgacttcg ccagggcctc tggggactac gccattgtga 60
 tcagccacaa ccctgacaac ggcacatcga ggattaagct gccctctggc gccagaaga 120
 ttgtccccag cagctgccgt gccatgattg ggcaggttgc tggaggaggc aggactgaga 180
 agccgatgct caaggctggt aacgcgtacc acaagtaccg tgtgaagagg aacagctggc 240

ccaaggtgcg tggtttggcc atgaaccctg tggagcatcc caacggagga ggtacccacc 300
 acaaaatggg tcagcctcca acggtcgccc aaaaccttcc cctggccaaa 350

<210> 8256
 <211> 406
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-H4

<400> 8256

cgcgctccgag gacgagtggg tttttttttt ttattccatg ccattatgcc aagtagatgg 60
 tcacagttgc taaagggtaa ttagccttct ttttaccgtg gccttacaag tataggtagg 120
 agcactatat cacaacactc ttacatctac gttactacgt atggtccgga tctgactcag 180
 ggacgatccc tctccttac cacttcactt gctcatgaaa gcgatgccct tctgaatgct 240
 ctgccccagt tccttctttg ccgcttcaag acaagctccc tcgaatcaat caaggggcaa 300
 accggaaggt ttctccggt ccaacaaggg caaacctcaa tttccttggg aagaacggga 360
 attccggcaa ctccgatgca acatatgagc aatccacgaa tccaac 406

<210> 8257
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-H6

<400> 8257

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 ctaagcccga accaaaacca gagccaaagc ctgagcctaa acccgaacca aggccagaac 120
 ctaagccaga gccaaagcct gagccgaaac cgaaaccaga tccaaagcca gagccacaac 180
 caaagccaga gcctaagcca gaacaaaaac cagagccaaa gccagagcct aagcccgaac 240
 caaaaccaga gccaaagcct gagcctaaac ccgaaccaag accagaacca gaaccaaagc 300
 cagagcctaa acctgaacca aaaccgatac cagaaccgga gccacaacca aagccagagc 360
 ctacgcctga ttcaaaaacca gagcctaaac ccgaaacata accagacccc caaccaaacc 420
 agaacct 427

<210> 8258
<211> 462
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-H8

<400> 8258

ggtctagaag tcccgggtcg acccaaactgt ccgcggacgc gtgggaggac gcgtgggccc 60
gtcccccttt cccattggcc tccacgatgg cgctccgcct caacgacgtc gcgtctctgcc 120
tctccccgcc gctcgccgcc cgccgctgcc gcagccgcag ccgcagcagc ggcagggttcg 180
tcgccgtcgc ctccatgacg tgcgcgtctt ccaccaaggt cgagaataag aagccatttg 240
ctcctccaag ggaggtacat gtccagggtta cacattcaat gccacctcac aagattgaaa 300
ttttcaagtc acttgatgat tgggctagaa ataatatctt gacacatctc aagccagtcg 360
agaagtgttg gcagccacag gatttcctcc ctgaaccagc atctgaagga tttcatgatg 420
aagttaacga gctcagagaa cgtgcccaagg aaatccctga tg 462

<210> 8259
<211> 411
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-021-Q1-E1-H9

<400> 8259

ttcccgggtc caccacgcg tcagcagacg cgtgggctcg gaatcagact gacaataccg 60
tcctcaggac aaggcacctc agaagccctt ctggtccgcg ccgcctcctt gaccccgctg 120
gccggcgagc tgctcagcgc ggcttttttt tgcattccaca atgccgcagc ttggcacatg 180
ttcattgcct ggagctgcaa tctatggcac ttcaactagg agatttggag gtttggagtt 240
tcagcagcat aaagttaatc acatctcatt tgggtcgaaa gcgtctgtta aagcaacatt 300
gaaaactgtg agatgcaatg ccaactcaaac aaaaagcgtc caaaagaaat cttcaagtgc 360
aactattcag cgtgataaga aaggaaatgt acaagggccca aaactggatg a 411

<210> 8260
<211> 327
<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-A1

<400> 8260

taccggtcta ggaattcccg gtcgaccca cgcgtaagcg gacgcgtggg tgcgtgcccc 60

ttttggaact cctgcctacg agctaggttg cggagtgtgg ttgctcgtt agagcttatt 120

ttcggacatc caaaaaacat gtttcctatg tgggatgatg gttatcttta tatttgtatg 180

ttaattagtc tctttgctgt taaatttcgt gtaagttggc cctgccgatg gagaatcgag 240

cagccccctt tttttgttct atcaactatg ctgtaatgct ggctatgttt cggcaaaaaa 300

aaaaaaacaa aaaaaagggg gggcgct 327

<210> 8261

<211> 452

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-A6

<400> 8261

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tgacgatggt tgaacgtcgg atcgtttttt tgagaagaac ctatttggag ctggaacaga 120

gacgacctcg accacgtcgg aatggggccat gtcgctgctg ctgaacaatc cagggacact 180

cgagaaggca cgagaagaga tcgacgccgc cgtggggcac tcccgcttgc tcaacgcggg 240

cgacctgccg cgtctcggct acctcaggtg catcatcgcc gagacgtgc gcctgtacct 300

cgcgcgcgcg ctgctgctcc cgcacgagtc gtcggcagac tgcaaggctc gcggctacga 360

cgtccccgcc ggcacggcgc tgctggtgaa cgtgtacgcg attcacaagg aaccgggctg 420

tttggaaagga gccgggcagg ttcgtgccgg ag 452

<210> 8262

<211> 354

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-A7

<400> 8262

ttccccggctc gacccacgcg tacgcccacg cgtcgcgcca cgcgctccgc cacgcgtccg 60
 cttatctgct aatgcatgga gtagttggtc tcatcatggg tactgtttgg agattggaga 120
 ccaactggat tgtctccatc atcctctgct ccattgtccg tgccctggga gcttgtggtt 180
 acgtgctagt gtcacgtttt ctgataagag aaaatattct cgcgctgata actgttaaca 240
 ttcattgcttc gttgacatac atcctgacgg cagctggcgt gaacacaatt ccttccatgg 300
 gcacaatata tctactcttt gggacactgc ttctacttaa ttgtgggttc ctcg 354

<210> 8263
 <211> 245
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-A8

<400> 8263

ggtactagtt aggaattccc ggctcgaccc acgcgtacgc ggacgcgtgg gcggacgcgt 60
 gggatcagca tacctgctgc tgccgccgcc gccgccagtt gtttgctgtg gaaagctaga 120
 tgcattgcgtg ttgtaaagga acctgaagcg ttgcattcgt catgattcat gcatggccag 180
 cctgctgcct gtaacaacaa actagtattg atcttattga gaccggaaac tgtattgcac 240
 atggt 245

<210> 8264
 <211> 481
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-A9

<400> 8264

ccggtccgaa attaccgggg ccaccacgc gtccggagtc tgcgtcgtcc acggagatca 60
 gggatcggcg gcgggggtatg gcgagggagc gacgggagat aaagaggata gagagcgcgg 120
 cggcgcggca ggtcacgttc tccaagcgcc gccgcggcct cttcaagaag gctgaggagc 180
 tctccgtgct gtgcgatgcc gacgtcgcgc tcatcgtctt ctctccacg ggaaagctct 240
 cccagttcgc cagctccagt atgaatgaga tcattgacaa gtacagcaca cattctaaaa 300
 acctggggaa agcagaacag ccttcacttg acttgaactt agaacatagc aaatatgcaa 360

atttgaatga gcaacttgtg gaagcaagcc ttcgactcag gcagatgaga ggtgaagaac 420
 ttgagggatt gagtgttgaa gaactccagc aattggggaa gaatctggaa tctgggtctgc 480
 a 481

<210> 8265
 <211> 391
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-022-Q1-E1-B10
 <400> 8265

gggtccagcc acgcgtccgc attgatatcg ctctgtggaa gtttgagacc accaagtact 60
 actgcacggt cattgatgcc cctggacacc gtgacttcat caagaacatg atcactggta 120
 cctcccaggc tgactgtgct gtccttatca ttgactccac cactgggtggt tttgaggctg 180
 gtatctccaa ggatggccag acccgtgaac atgctctcct tgcgttcacc cttggagtga 240
 agcagatgat ttgctgctgc aacaagatgg atgcaaccac tccgaaatac tccaaggcac 300
 gttatgatga gattgtgaag gaagtctcat cctaactcaa gaaaattggg taaaaccctt 360
 ataagaatgc ctttgttccc atttccggtt t 391

<210> 8266
 <211> 383
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-022-Q1-E1-B12
 <400> 8266

ggtcgaaat taccgggtcc acccacgct cgcacacgc gtccgcacac acacgcacac 60
 aactatcgt ccagcaagct cgctgttgct tgccaccac cgcctcagct cgatcgcaac 120
 gcgcttgga tggcgccga ggtgtggcta tcgcggcgt ctgcctccc atccctctcc 180
 aacgcaccac ctgccttacg ctccaagcct gccaccacaa ccgcctcttt gctctctccc 240
 tgtecccgcc ctgcccgcgc cctgcctgtg ctgctgttcc gtgcgcccg ccgacttcgc 300
 gccaccgagc agcaaggcca ggttcaggag caagatgacg aggtgggtgga caggaacatc 360
 ctcccctact gcagcatcga cag 383

<210> 8267
 <211> 395
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-B5

<400> 8267

aattcccggc tcgacccacg cgtacgcca cgcgtccgcc cacgcgtccg ggcaatatgc 60
 catttggtcc agcaatgaac tctactgctt ctgttgatga tcttatcatg aatctgcact 120
 ctgaccaggg aagtaactcc tttggctgct cagacttggg ctgggagaat gataccaaga 180
 caccagacat cacttccatt gctcccatth ccactattgc ggaaggcgac gagtctgcat 240
 ttgtcgacag caattcaaac agctcatttg tgcttcctgc cctggagaac agtgctgttg 300
 atctcactga tgggctgaca gatttagaat cctatatgag gtttcttctg gatgggtggc 360
 caagtgattc agttgatagc cttctgaacc ttgat 395

<210> 8268
 <211> 404
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-B6

<400> 8268

aattcccggc tcgacccaca cgtacgcca cgcgtccgcc cacgcgtccg gtataaaaat 60
 gattgtacag agagtttacc tgtggaccat ctgagaggag atgtggcctt gtttaciaat 120
 gtatgttttt ccttcataac ttgttgatgt attgcatttt gtgcatcctt gatagaacca 180
 gggctcattg tcagcaattc ttgttacaat catgggtgcat tcgaaacggt tgctctgtaa 240
 atgtaatgat tattaagtaa ttatataagt tctgtaacaa taattttaaa tatacatttt 300
 attggtgtag tatgtcttac catttcatca aatgggtoga ctaatttcat ttctaaaaat 360
 gtcttttgct caatcttggt ctgcatctcg ttcaatgtcc gaat 404

<210> 8269
 <211> 362
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-B7

<400> 8269

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tttcatttct tcctttggag tagctatctt cacttctaata gtacggctcc caaggaagaa 120
atgaaatcac aaggaacaaa gaaagctaca aggatatttg ttgctcgaat tccacagtca 180
gtggacgagt cgatgtttcg taggcatttt gaagcttttg gagaaattct tgatctttac 240
atgccaaaga gtctgtggac agcatcatgc aagagtcaca tgagcttgat ggcacaacag 300
tagttgttga tcgcgcgact ccgaatgagg aagatgtaag ataccccccg agtagaccat 360
ct 362

<210> 8270

<211> 375

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-B8

<400> 8270

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ttgcactggg gcttgctcat aattagttca tcagcaaaca ccacacattg gcaccgaggc 120
tagcgtgcct cctagctctg gccatggcag ccatcgtcgt cgcgcgctgc acggcccaga 180
actcgccgca ggactacgtg gaccgcata acgcggcgcg cgcgcgacgtc ggcgtcgggc 240
cgggtgtcctg ggacgacacc gtggccgctg acgcgcagaa ctacgcggcg cagcgccagg 300
gcgactgcaa gctgatccac tccggcgggc cctacggcga gaagctcttc tggggctccg 360
ccggcgccga ctggt 375

<210> 8271

<211> 359

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-022-Q1-E1-C10

<400> 8271

ccacgcgtcc gcgaaagaca cgatactcgn ctggcggcct cgtacggcag cgatgcccaa 60

ggctcgatcat tacgggtcccg ttcgtgcggt cgaagatgca ctaccacaga acgttgctct 120
tatatataca cacttcacta tgttcactgc gtcagacaac atttctatag ctcttgtaac 180
cccatcgcca gcgatggagc tggctaatat tcaatatcat gcaaatacagg cgctcgctc 240
tgtatgacaa cagcggatat cgagcctgaa ggcaccaatg ctgctacgta cacgtcacca 300
gactgcgatc tacggcatgt gattcaatcc tgcgggaact gtgatagcat caggttccc 359

<210> 8272
<211> 417
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-022-Q1-E1-C12

<400> 8272
gggtccagca cgcgtccggg cttatcctcc ccctcttacc aagtcctcct cgggttaggg 60
ttccttaggg ttttgtggag gggcgatggc ggcggctgat gtggagtacc gttgcttcgt 120
cggcgggctt gcctgggcca ccagcaacga gtcgctggag aatgccttcg cctcctacgg 180
cgagatcctc gactccaagg tcatcaccga ccgggagacg gggaggctctc gcggcttcgg 240
cttcgttacc ttctcctccg agaactccat gtcgacgct atcgagaaca tgaacggcaa 300
ggagctcgac ggccgtaaca tcaccgttaa ccaggcccag tcncgtggcg gtggcggtgg 360
cggcgggtggc tacggcggcg gtcgcgggcg cggcggctat ggtggcgggc gccgtga 417

<210> 8273
<211> 374
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-022-Q1-E1-C4

<400> 8273
cccggtcgc ccacgcgta cgaagacgac ttgtttcatt gattcttgaa gagatcgagc 60
ttcttttgca ccacaaggtc gaggatgtct tgcaactgcg gatcaagctg cggctgcggc 120
tcaagctgca agtgcgggcaa gaagtaccct gacctggagg agacgagcac cgccgcgcag 180
gccaccgtcg tcctcggcgt ggccccggag aagaaggccg cgcccagatt cgtcgaggcc 240

gcggcgaggc cggcgaggc cgcccacggc tgcagctgcg gtggcaactg caagtgcgac 300
ccctgcaact gctgatcaca tcgatcgacg accatggata tgattattat ctatctagct 360
tgtgggtggtg gttg 374

<210> 8274
<211> 453
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-022-Q1-E1-C5
<400> 8274

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gccagaagca ggcggagaag aagcggcgcc gacttgagaa agcgtggca aactcggctg 120
ccataatctc ggagctggaa aagaagaagc agcagaagaa ggaagaacag caaaggctgg 180
acgaggaagg tgctgccata gcagaagcag tcgctcttca tgctctcata ggcgaggact 240
ccgatgaacc ctgccatttg atgctgaaca agcaccatat aagggtgcaac cattgggccc 300
cctcggctgc ttttgaattc accgtggacg cacagcccg cagaggtgtac ccgtctgagg 360
atggactggt atgcggcagc catgcgtatg ctccaagagc cccaagggg aagcgggctg 420
attgggggat tggacaggca ctgccatgct ggg 453

<210> 8275
<211> 329
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-022-Q1-E1-C6
<400> 8275

aattcccggt tcgacccacg cgtacgacc agtcccggtc ttgtgctagt aagtagcaag 60
cagtgttacc ttttgggtatt ttaaccagca gctaagttcg cggcatttta gtcctgtaa 120
gcggtaagca gctctgtagc gtgagataga tggccaagcg ccggtacgta cgtgtagtgt 180
ctggtcttct cactgagtgt actataaaga gttaatatag gagctgacc tgtgaaccg 240
cgtgatggat gcatatgctt agtgcaaaaa aaaaaaaaag atgaaaaaaa aaaataacaa 300
aagaaaacaa aaaaaatcaa agactacaa 329

<210> 8276
 <211> 369
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-022-Q1-E1-C7

 <400> 8276

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 atagtgtacc aacaatggca gccaaaatat ttgctcctct tatgctcctt ggtctttctg 120
 caagtgtctg taccgcgacc attttcccgc aatgctcaca agctcctata gcttcccttc 180
 ttcccccgta cctctcacca gcggtgtctt cggtatgtga aaacccaatt cttcaaccct 240
 ataggatcca acaggcaatc gcagctggca tcttaccttt atcacccttg ttcctccaac 300
 aatcatcagc cctattacag cagttacctt tgggtgcatth attggcacaa aacatcaggg 360
 cacaacaac 369

<210> 8277
 <211> 464
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-022-Q1-E1-C8

 <400> 8277

 ggtacagggt aggaattccc ggctcgaccc acgcgtacga gccgaagaag atgcaaactt 60
 gaataggcaa tcaaaaccag ccattaacaa acttatgaag ctctctctgc tcatagatgt 120
 tctctccaag aagaatcttc agcaggaatt tcttgaccac ggagttctca ctcttctaaa 180
 aaattggctt gagccattac ctgatggaag catgccaaac atgaatattc gatctgctgt 240
 actgaaatta ttaactgatt ttccaattga cttggaacag tatgaccgaa gagagcagct 300
 taagaaaagt ggtctgggaa aggtcattat gtttttgtcc aaatctgacg aggagactac 360
 tgcaaatagg aaattggcta aggagctggt tgaataattg aatccaacaa ttattcaaca 420
 ggagcacgag atttgaggac atgaagagat atgatgatga aaga 464

<210> 8278
 <211> 434
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-C9

<400> 8278

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ccatgggtgt gcaagcatac atctacggta attgcatgct tctcctgcct tgaagcggaa 180

gccttagcct tagcctgccg cctgggggaa accttctgtt tcgccgctgc cgctgctgtg 240

gtataaaggt ggaaggctga tccgtcgacg gacggagtcc cggcggaggg aagattgctc 300

cgtcgccgcg gtttcgcggc caagaagggt gcctacgcgg tggaaagggg ccgggccggg 360

ccgttaagga atcttgtctc gacgccaatc cctcctctgc cctcgtattt tcgggcggtt 420

gtcgggtgctg cctt 434

<210> 8279

<211> 342

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-D10

<400> 8279

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tatatgagat taactcagtt aagggtgaag ggcccgaac tgaccagag aaatgggagg 120

agctattcag atctgctcgg tcagactagt ggcattctgc aaagcgtagt aacgtaatgt 180

aggaatatgc atcgtaatac aatgtaatcc atagagtgc gccctaattc aatagtcact 240

gaacagtagc gatcatgtag agaatatattg gtttgtgtac atagtatgag cattcatata 300

tgacgattat acctcctaaa agtgatagtt tttgttgga aa 342

<210> 8280

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-D12

<400> 8280

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 acaagaagga atcgagagca aatgctatct tcaaccacac tccgaccgcc ggcgccggcg 120
 ccggcgccgg cacacctcac catctgctcc tcgcccgcag cgtggcgggcg tgcgccggcg 180
 gtgcgcggcg tgcggaacta cgactccatc ccgaagcggg agcccttcag ctccagccgc 240
 agcatcctcc acgagttcct caggcaggac aagcccctca tccagcgcac caaggaccag 300
 atcacagatt attgcacggc catcgaaggc gatgagtgtt gcagctgttg ggacgcttac 360
 tttgaactga ataaacttga gcaagagctg cccaagacg aaa 403

<210> 8281

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-D2

<400> 8281

ttccccgctc gccccacgcg tcagcagacg cgtgggcaag aaccaggcgg acccgccgcc 60
 ggccgaaggc ctgcccctgg accgctgggc cggggccagg tacgccgccg tgcgccgctt 120
 cgggggcttc gtggcggacg tcgacgttcg ggagcaggcc gcgcgcctcg aggccaacct 180
 ccagggcacc cgggtgggccg ccgccgtcaa cgacgcgcgc agggccgacc cggcctcgcc 240
 ctacaccgtc gcgcagtaca actcgccctt cgagttcacc ggcagggtca acgagatctg 300
 gatgctcttc gacgccgacg acgacgccag tacttcgtga tgcgattcca agcgtgctct 360
 gggggcaccc ac 372

<210> 8282

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-D4

<400> 8282

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 cgtgaactcc gccgtggcgc agcaggctcg tgtggggggcg tcgctgctcc ggctccactt 120
 ccacgactgc ttcgtccaag gctgcgacgc gtccattctg ctgaacgaca cgtccgggga 180

gcagacccag ccgccgaacc taactctgaa cccgagggcc ttcgacgtcg tcaacagcat 240
 caaggcgag gtggaggcgg cgtgcccggg cgtcgtctcc tgcgccgaca tctcgcgcgt 300
 cgccgcccgc gacggagttg tcgcgctcgg cgggccttcg tggaccgtgc ttctgggcag 360
 aagggactcc accggttcgt tccctaacca agaaagccaa ctccaacttc ggacttcaac 420
 cct 423

<210> 8283
 <211> 363
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-D5

<400> 8283

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 ggctttcccc gtcggcgccct cccagattt ggccgccgcc gccgctgacc caggttgtct 120
 tgatggcgcc cgctgtagaa gccgtgaagg agacaggcac cttccagaag gttcctgcct 180
 tgaacgaaag gatactgtca tccatgtcca ggaggtctgt tgctgcacac ccttggcatg 240
 atctggagat aggtcctggg gtcaccaacca tattcaactg cgtcattgag ataccaaggg 300
 gcagcaaggt taaatatgaa cttgacaaga aaactggact gattcaaggt ggacgtgtgc 360
 tgt 363

<210> 8284
 <211> 382
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-D6

<400> 8284

aattcccggc tcgaccacaca cgtacgaagc aaccacgccc ccacgccag tccaaccca 60
 acccgcaag ctggcgcgcg aggcggccga cgcgagcgcc cgcaagcgca aggcggggga 120
 cggcgcgag gtccccgacg ccaccgcctc ggcagagggt gccgcagcgc cgacccccgg 180
 agaggacgag gccatgggag acgttcacaa ggcgccgcac gctgcgggag gtggagaaga 240
 gtggcggggg ccggacccta accctagccc gagcctcggc ggctgctcgg accccgtgtc 300

ggtggagctc tccatgggcg gggactacta ccgcgcctgc tgcggcgagc ccgatccga 360
catccccgaa gggcccaagc tg 382

<210> 8285
<211> 374
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-D7

<400> 8285

ggtactagct acgaatgccc ggctcgaccc acgacgtacg gcaaataagt gatctttctg 60
ctaattgggac tgccattgaa agtaatgata ataccagcc acctgtgcaa gtgccccaaag 120
aggatccaaa gaaggcccta cttgttgctc cteccccctcc aactcagatg gatgttacta 180
agaaatctta tgcattccatt gtcaagggtca tgaaggaggg cccaccaact ccagttgtca 240
aaacaacatc gtcagtttcc aaacagaagc cagctcctaa accagtgtcc acggctgtcg 300
aaggcctaga gaaaccatct gagaaacctc cccaggctat tggaaccggg gatgggattg 360
tttgccataa caac 374

<210> 8286
<211> 462
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-D8

<400> 8286

ggtactagct acgaattccc ggctcgaccc acgacgtacg ctctctcccc tcttaccaag 60
tctctctcgg gttaggggttc cttaggggttt tgtggagggg cgatggcggc ggctgatgtg 120
gagtaccgtt gcttcgtcgg cgggcttgcc tgggccacca gcaacgagtc gctggagaat 180
gccttcgcct cctacggcga gatcctcgac tccaagggtca tcaccgaccg ggagacgggg 240
aggctctcgcg gcttcgggctt cgttaccttc tctcccgaga actccatgct cgacgctatc 300
gagaacatga acggcaagga gctcgacggc cgtaacatca ccgttaacca ggcccagtcc 360
cgtggcggtg gcggtggccg ccgtggctaa cgggggcgtc cccggcgccg gcggttatgg 420
tggcggttgc cgtgacggcg gttatggcgg cggtggcggc ta 462

<210> 8287
 <211> 81
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-022-Q1-E1-E3

 <400> 8287

 ccacgcgtaa gccaatgcaa ccataatata tgattcaaaa caactggaaa aaacaagtcc 60
 agcaattttc accttgtaat g 81

<210> 8288
 <211> 388
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-022-Q1-E1-E6

 <400> 8288

 ggtactagct acgaattccc ggctcgaccc acgacgtacg caaggattta ggtggcgtaa 60
 atcttttggc tgttgacatg tagtgaacaa gtcaagtaca agtagcaatt gacaagatca 120
 caagaacctt ttggctctca tgaacacttg atatggatct tttggttctc atgtttttac 180
 tcaatggtga acttgtaatg aacttgtaac agatgtgctt ttgggagcgg tttgcacatc 240
 tgttgatgcg cacctatggt gtaagcacat tgtatgtggt aatttggaaa tttggatggt 300
 taatgtggtg aactagtggc gccatgctag ggtggtgga cactaactgg atattaatct 360
 agctgtgaac atctgatgtc tgatgtga 388

<210> 8289
 <211> 407
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-022-Q1-E1-E7

 <400> 8289

 cccggctcga cccacgagta cggggaagag cggaatggtc agaagctagc agcttcaatg 60
 gtagagtacc agggccagtg ggtgataaga gaggcagtgg ccctctgaag agttctgctg 120
 gagtgcggat gcgagaggca cagcctacca atgttctctg ggttggtttt ccaggttctt 180

atagagtcac tgatgaggag gcacttaagc atgccatgtc agtattcggt gtcggttacga 240
agataaaagt tttccagaca aggcagtatg cttttgttga gtttgcaaat gttgcggaag 300
cttgtaatgc taagatgaat ctanatgggc atcttttcaa tgattccagg attcagattc 360
ttttctcaaa cagtgggctt gcaacaaaca aattgggcca accaaca 407

<210> 8290
<211> 394
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-E8

<400> 8290

aggctactagt caggaattcc cggctcgacc cacacgtacg attcattcta ggaagtctca 60
ctctggccct aatcatgctt tcatgtataa gggtagagaca tctagctcta ggcaatcaac 120
ccatgctaag ttgcctagaa agaaagctcc tagtgcacat aatgatcata atatttcatt 180
taaaactttt gatgcattct atgttttgac taacaaatcc ggcaaggtag ttgccaaata 240
tggtgggggc aaacacaagg ggtcaaagac ttgtgtttgg gtacccaaag ttcttgtatc 300
taatgccaaa ggacccaaaa ccatttgggt acctaaaac aagaactaaa cttgttttgt 360
agggtttatgc atccgggggc tcaagttgga tact 394

<210> 8291
<211> 383
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-F1

<400> 8291

tcccggctcg acccagcgt acgaaaaac actacgtcca ttttgagaat ggtgggtcag 60
gagccctgca atgtgggtcc tccaacgtat ttgatcccc acttgaaggc caagctacca 120
ataactatgg tgggtgtgaaa gccgggagca actcaggcag caacaagggg cagaacaatg 180
ggagtacggc tgctgcaaat gctggactgg cagaaacgga gatacaggcc atggacaaaa 240
gtggagtggg aggtggcaat ggcaatggga gtggcagtgg cagtggcaat gacacatatg 300
tcagacggct tgctgcgaac atgacaccgc gacaagcaca gctaaagaaa tatagagaga 360

aaaagaaaga ccggaacttt ggg

383

<210> 8292

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-F5

<400> 8292

aattcccggc tgcaccacg cgtacgggtg ttgcttcagg gcagcgggca acatggtgga 60
attgctgtgg cctttttgat gcttttactg gttcaggag atagatgaag cgttagaact 120
tgaagtcaag aagacagaaa atgcggtgac gttcagttca aagctgatga gcagctgtaa 180
ctagactttg tcacatgaat gatgaagcag aaggattccg gataacatcg agctgatgtt 240
ttcacttcct tcttcctgt gtctctgcat ctgtgcaaag ttacatcccc tggtcgagg 300
taatattcct aatttcctta gcaccccaa cgcctagtcg tgctgtctag gtactggtct 360
tgtagcatag taagtgttga agtgggttca ccgttaaaga tgttttgggg gttccggctt 420
tttttt 426

<210> 8293

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-F6

<400> 8293

aattcccggc tgcaccaca cgtacggga cgcgtgggag cgcacgcaac gcaaaaacaa 60
gcacaaacac gcgcgatccg atctgggccc gccaaagcagc caccatcca tggcgactag 120
ggtttggctc accgccctcc tgcttggttt cctcgctgcc gcctccccct tcaccggccg 180
agttgctaga gctgaatccg aggaagatgc tgctgcagct gaggttggtg aaggggctga 240
tctaggtatt gtgggtgatg atacacagg ttccagtgat ggacctttaa gtctgctcc 300
tggtgtagag acagtagttg tcttcccaa aaatgctggc aaaattgtac tatcaggtga 360
agaaactgaa ttactagttg gtccgcaaaa tgaccgtgaa tccattttgg atggtggtgg 420
cggtcca 427

<210> 8294
 <211> 352
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-022-Q1-E1-F7

 <400> 8294

 aattcccggc tgcacccacg acgtacgcca tgcgctccgc cgggacggcc acggcgatct 60
 cctcgctgat gctgccggac actatcgctg tgctaggctg ctgctacgta ctgtaagact 120
 gttatgtttg tgctcactgc acgatcacta tcacgaccta cttactatat acatgtggct 180
 gctcggttgg accggagctt ggtgacgtgg aaatcttggc ccactagatc acgtgggtttg 240
 accgcgagaa aatttcacag aattcgttcg gacaggtaca ggatagtaca ggtgctgacc 300
 agaaatagac acagtagttg tcttcccaca taaatgctgg caaaattgta ct 352

<210> 8295
 <211> 71
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-022-Q1-E1-F9

 <400> 8295

 aaaaggatca aagcttactt acacgtgaat gcaacgtcaa acctcttcaa aagtgtcacc 60
 aaaattcaat t 71

<210> 8296
 <211> 307
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-022-Q1-E1-G2

 <400> 8296

 ttttgaattc tgaaaaaaaa taagtatgga ccaccataat gatgtacaca aaccgaaggc 60
 ctctagcctc taggagtgtc gctgttggtta cacgtagaa cagggcgctc cgattaggag 120
 cgaaaacaca tggggagaga ggcataccac ccaccacctg tgggggtgggg gtatcctttc 180
 atgggagtag tagagatctg ctggagacac cgttccacta tggttctcttg aggatgtagc 240

cgacgacgat gccagaggagg cccacgacaa acaagaacgt gatggagaaa ccgctgccgg 300
 ttttgct 307

<210> 8297
 <211> 447
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-022-Q1-E1-G6
 <400> 8297

aagtcccggc tcgaccacaca cgtacgcctc gccgctgctc aactgcgggc gcgcgccggc 60
 tgcggcgggc tcggctcgagc acctcgcggt ggtttcgccg ttgttgctac cggcagtggc 120
 ggcgccctagg catggggccgg tgctgtgccg cgccatgtcc gagggggacc tcgccgcgcc 180
 gctcgtgccc aagaaggacg atggacacgg gagggcgccg aggtctgtccc tgtccgcgtc 240
 cttgtcctcg tccgcctcca tcttcgtcga ggaggaggac ggcgagggcg aggaggagga 300
 ggacctggtc gcggctcgcg gggccggcgt ggacgtgccg ctgccgctgc gtcggctgct 360
 gacgaacacg gggctggacg tgtccgcgcg cgccgggctg gggttccttg aaccagggcg 420
 tcggggggcag cggcgggggc gggaagg 447

<210> 8298
 <211> 428
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-022-Q1-E1-G7
 <400> 8298

ggtaccaggt aacgaattcc cggtcgcacc cacgacgtac gccacgcgt ccgccacgc 60
 gtccgtgagg atggagtcac ccgtacctg aaatctgggt gtctactaat tggcaggaca 120
 attgcagtat tottgacact gacactagct acatccctgg ctgcaaggga agggcctgtt 180
 ccaatggcgg gctatgagat atgcttgcaa gtgtgggttaa caatttctct gctcaatgat 240
 gctctagccc ttgctggcca ggctctactt gccagcgaat atgcaaaagg gaattacaag 300
 caagcccgca cggttttata cagagtcctg catgttgggt gtgtgactgg ttttgcctt 360
 gctgcttcct taattgttgg atttgggatc ttggccttgc tgtttacaga tgattcaacc 420

attttaaa

428

<210> 8299

<211> 452

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-G8

<400> 8299

aattcccggc tcgaccacg cgtacgccca cgcgtccgcc cacgcgtccg cccacgcgtc 60
cgagagccga aagaagttga agaggcaacg aagggtgaga aaaagaagaa gactattaca 120
gagaaatatt gggattggga actagccaat gagacaaaac ccatatggat gagaaatcca 180
aaggaaattg agaacaccga atacaatgag ttctataaga agacattcaa tgagtttttg 240
gacctctttg cccacactca cttcacaact gagggtgagg tggaattcag gagtgttctt 300
tatgttccag gcatggcgcc tcttagtaat gaggagataa tgaaccccaa gacaaaaaat 360
atccggctat atgttaaaag aatcctcatc ccctaagaac ttggatgggtg aacggttccc 420
aagatacttg agctttgtga aagggtgtgtt gg 452

<210> 8300

<211> 78

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-G9

<400> 8300

ccaaggggtt ccaacgttta cgtccgcgtt caggtcagtt cacagctctt ctatagggtc 60
ccccaaattc aattcccg 78

<210> 8301

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-H5

<400> 8301

aattcccggc tcgaccacg acgtacggg ggccgagatg ctgcgtcgtc gcagccatgg 60

ctacggagcc attaaaaggg ctgttcttgg aagtgtgagc gactactgtg cccatcacgc 120
gactgcacc gtgatgatag taaagaagcc caagcagcac aagcactgat caatgccgac 180
tgatcactac gtgtactgca aataatatgt actactgcaa agttatgtgt gcgtccgtcc 240
gtttgtgaat aattgggtca tcaaccatca catcttcggg tgcttctaca agtatccgat 300
ccaatccttc tacgtgtgga ttgggattta caaataattg attgttctct gaacctgaaa 360
acaatgtatt tgtattaatg tgttgaaca attaaatggt gttgcaactt cctttcc 417

<210> 8302

<211> 339

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-H6

<400> 8302

gacccacgcg tacgcccacg cgtcagccta ctcgtcggca gccatggctg cggatgcatt 60
agtcgggctg ttcttggaag tgtgagcgat gactgtgccc atcacgcca ctgcaacgtg 120
atgatagtat atatgcccac tcatgacagt cactgatcac tgccgactga tcactacgtg 180
tactgcaaat attatgctgt agtgctaagt tatgtgtgcg tccgtccgtt tgtcaacact 240
tgggtcatca gtcacacat ctctgggtgc ttctagacat gtccgatata atccttccac 300
gtgtggattg ggattcacta aattttcatt gtctgtaga 339

<210> 8303

<211> 380

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-H7

<400> 8303

ggtaccagca aacgaattcc cggctcgacc cagcgtacg cccacgcgtc cggcgagcca 60
tcgacacgat cgcgagcgca agcacgtacg ttgtcggaag ctcaagttag aagaagcacc 120
agtgcctgat cgatggcggc ccaggctctc ctctccggcc ggcagctgct gggccgcccc 180
gtgcagtcgg ccgtctctag gtcgtcggcg aggaaggcgc ccttcgtcgt cagggccagc 240
tccagccctc cagccaagca aggtgccgac aggcagctgt ggttcgcgtc caagcagtc 300

ctctcctacc tcgatggcac gctgcccggc gactatggct tcgaccgct gggcctctcg 360
gaccggagg gcaccggggg 380

<210> 8304
<211> 378
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-022-Q1-E1-H8

<400> 8304

aattcccggc tcgaccacg cgtacgaagc ctttgggaa gcagctcagg gacaaatag 60
tgagacaca gcagcttctc ctccagatcg ctgggcacaa ggatattctt gaaggcgatc 120
cattcctgaa gcaggggctg gtgctgcgca accctacat caccacctg aacgtgttcc 180
aggcctacac gctgaagcgg ataagggacc ccaacttcaa ggtgacgcc cagccggcgc 240
tgtccaagga gttcgccgac gagaacaagc ccgccggact ggtcaagctg aaccggcgca 300
gcgagtaccc gccgggctg gaagacacgc tcctcctcac catgaagggc atcgccgccg 360
gcatgcagaa cactggct 378

<210> 8305
<211> 399
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-A12

<400> 8305

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tctttttata tgtggtggtg cttttgtgga cttggaaaag actatttctg aaaggcgcca 120
agattcatcc ataggatttg gggcagccat tcgtacgaac atgagaagtt ctggagctag 180
ctgtccaatg gttacctcat ctttattaga atctgttgaa agtggtgatc ttgtaagata 240
tggtctaatt ccggagttca ttggtcgttt gccattcta gtaagtttgg gagctctgaa 300
tgaatgtcag ctggttcagg ttctgacaga accaaagaat tcactttcca tacagtacag 360
gaaaatgttt aacctgaaca aagtttagct gcactttac 399

<210> 8306
 <211> 379
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-A8

 <400> 8306

 cagggtaccta tctagaattc gcgggccgac ccacgcatca gcattgattc ttgacgagat 60
 cgagcttctt ttgcaccaca aggtccaaga tgtcttgcaa ctgcgggtca agctgcggtt 120
 gcgggtcaag ctgcaagtgc ggcaagaagt accctgacct ggaggagacg agcaccgccg 180
 cgcaagccaa cgtcgacctc ggcgtggccc cggataacaa ggccgcccc tacttcctcc 240
 aaggcgccgt tgactccggc aaggccttcc agggctgcag ctgcgggtggc aactgcaact 300
 gcgacccctg catctgctga tgacatcgat tcagtaccat ggatagtggg actatccatc 360
 tacacttctg ggggtggtct 379

<210> 8307
 <211> 99
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-B10

 <400> 8307

 aaaaggatcc aagtttactt acccttcaat tcaaattcac accccttcaa aaatgccacc 60
 aaaatccaat tcaactggcct tcctttaaaa ccccttttc 99

<210> 8308
 <211> 402
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-B11

 <400> 8308

 tcgaccacg cgtacgccc cgcgtccggg aagagaggcg cgcaagcggc cgggtctcat 60
 ggcgcccttc cccgccctcc gctcatcgtc gccggtggcc gccgcgcggg cgcgctcgct 120
 cggtcgcgtg tccggccacg catctgcggc gccagcaag aggcgcgtcg tctcctgcag 180
 ggccgtcagc agcaggtcgc tgtccatcat cagggtgcgag cagagcgcca agaaggcgcg 240

cgggccggac acatggctgg gccgcgcggc catggtcggc ttcgcctccg cgatcgccgt 300
 cgaggtggcc accggcaagg gcttcctcca ggtagggacc gtcgtagagt atgagtatca 360
 acgtaacatc gacagcagcg agggacgccg aaacgcgtgc gt 402

<210> 8309
 <211> 300
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-023-Q1-E1-C10
 <400> 8309

tcgaccacg cgtaaggcac gccatggcct cctcgcctc tgcgcgcgtc actgcccctt 60
 ccttcgccga accattccca gccgcgcggc tggtcataag gatgtcattc aacgtgagcg 120
 cctcacttgg catcgccatt ggtaccatca ccgttccaac gcgcgacaca tcactattag 180
 ccagcagtga cacggcctac gacgttctgc ttgtctcaca ttatagacgt ctcgtcgtca 240
 aacacagcat gacaatttcc aggtttgtta cactatcaca ttcagtccca tggctcgcgt 300

<210> 8310
 <211> 351
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-023-Q1-E1-C2
 <400> 8310

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 atgaacgcca cccatctgga gctgcccaag aacctgcacg ggtcacccgt gaatgtggcc 120
 aatttccgcc aggcattgaca ccacaaccg ttctcacatg ccgagctgca actgcagaac 180
 tttctgatcg tgctcttgtt ccaggtcgc accgacagtc ccatcaacta gtcgtctgag 240
 aatatggacg tctactcgcg cctcgtctc gtcaacagtc tccggtgaca cacgattacg 300
 acctccagtg agcgagaatc atcgttctct gacagttctgt atgctcttat g 351

<210> 8311
 <211> 150
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-C3

<400> 8311

cccacgcgtc cgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
aaaaaggaaa aaaaacaaaa agataaaaaa ataaattaaa cataaaaaaca aaagtaaaaa 120
atcttcaaaa atgtaaccaa agggtcactt 150

<210> 8312

<211> 436

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-C5

<400> 8312

aattccgggc cgacccacgc gtcagaataa gacgacttgt ttcatgatt cttgaagaga 60
tcgagcttct tttgcaccac aaggctcgagg atgtcttgca actgcggatc aagctgcggc 120
tgccggtcaa gctgcaagtg cggcaagaag taccctgacc tggaggagac gagcaccgcc 180
gcgaggcca ccgtcgctct cggcgtggcc ccggagaata aggcgcgcc cgagttcgtc 240
aaggccgcgg cggagtccgg cgaggccgcc cacggctgca gctgcggtgg caactgcaag 300
tgcgaccct gcaactgctg atcacatcga atgacgacca tggatatgat tattatctat 360
cgatcttggtg gtggtggttg aacaataata atcgacgccg agctggatgc catacatagg 420
tactgtgtgg tgtgtg 436

<210> 8313

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-C9

<400> 8313

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gagcaagatg ctttatgcaa gctcaaacca aaaattcaag agtgggctca atggcattca 120
ggtggaactg caggctactg atgcaagtga aatcagcctt gatgagatca aggatcgggc 180
tcgctaggca tcatgatcat gcatcatgga ctgggcctac tactgtggat ttgtatgcc 240

ttatagactt ggtgctgtga aagactgctt gatgatttgc gggtttgttg ctgtgtaaaa 300
aaaggtccca tggctcccag aagaccatga aggttcggat ctatcatgta attccttggt 360
atctgccaat tatgtatgga ctatggacat gtgttgcgct gttcagetta atactaccaa 420
taagtaatcc ataatgtccc ttcc 444

<210> 8314

<211> 452

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-D5

<400> 8314

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cgggtggaagt ggaacgcgcc gatgcgcaag ttccaggact ccatcaaggc cctccaggcc 120
gacatcgatc acgccaatgc gatggcgctc gaattcctga gggactacga cggtcggtc 180
atccagatgc ggggtggcgta cagcgccgctc gcgcatttcc tctgcagtgc gaccgactgc 240
aagctcgccg gcgcgctcgg cctcctcaag gttatgctat acaagggtgtg cgcgacggc 300
tcgtcggcgc ttctgattg ggagatggag gccagcatca gggagtctta cggcgtcatt 360
ttcccgtcgc tgctgcagct tccgagtggc atcaccgagc tggacgacag gaagcagagg 420
aagctctgcc tgaagaaatt caggagcagg ga 452

<210> 8315

<211> 301

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-E1

<400> 8315

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ttgctgactg tgactaaact gccagtatag gttatcgtga tggtacaagt cctgttttta 120
actaaaatac ataggggaatg tgcagcttgt acttcatcgt tttatttttg gtagttgaaa 180
tatggactta tgaatcatct ttagttaagt tgtacagtgc tggttaactat ttatactagt 240
ttttgagcgg ctatttgtac ttgttgaagg agtaatacat agtggtgata ttggtggaaa 300

a

301

<210> 8316
<211> 366
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-E11

<400> 8316

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acaaaagggtg catcagggaa tgtgacaaca gaagatgatg gggatgcatt ccaacggatt 120
gagccttaag acggccttca tgctacgtca tgtctcttcc acaggggtcaa ttcattcttca 180
ggtaactggc actgcattca gagtctaatt catggaaaac cctgagcatt atcaacgtta 240
acccctttac actctaacc cttttcacca tcagctgttg cagataattg cgctacactt 300
atcgcatctt aaaaaatttg ctgacgctaa tctggtagat agaccctccc tgtacctggg 360
cattaa 366

<210> 8317
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-E2

<400> 8317

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acctagatcc actatatgtt ggtgattacc cagaaagcat gcgtcaacga ttgggcattg 120
atgttccaac cttctcagag aaggataaag agttcatgag gaacacaatt gattttgttg 180
gagtaaatca ttagacttca agactcattg cacatctcta gaatccagac gatgtttatt 240
tctaccaagt gcagcagatg gagcgaatag atgaatggag tattgggtgaa aaaattgggtg 300
aaagggctgc atctgaatgg cttttcagac ttccttgggg ctttcataag tcacttactt 360
atatagcgaa gaagtacaat actccagcaa tttatgttac tgagaatggc atggatgaag 420
aggacgatca atccg 435

<210> 8318
 <211> 420
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-E4

 <400> 8318

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 cttgcaattc ggttgatattt gcatgtctct ttggcacgat atggacaaag gaaaatagag 120
 aaggatgacg ctgctgtggt gcagcaagct gtggttatct acaccaagga gtttttgaag 180
 ttcactgaat tcattggtga ggtctttgtg aatgcaccat tctttatata tgctgaggat 240
 gcaggtgccg tggatgcaag gaaaagtgat gagtacaaag aaactattat tccagctgga 300
 aagacacatg aggtcatttt gagtggtgaa gctgtaaact catacatcgc atgggacttt 360
 tccttgcaac aaggggccct caacatggac attggctttc atgtggagta cattagccct 420

<210> 8319
 <211> 364
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-E5

 <400> 8319

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 taccatgagc gacgaattct cgaaaagggt ttttgactat gttgatgaga ggaagaacct 120
 agacatcgat cgtctcgctg aggctgtcgc gattccatcc gtttcctcgg atttggaana 180
 tcatctggtc gacatcaaca cattgatcgc ttggactaag ggtcatatag agcgcctcgg 240
 tggattgacg gagctcgtea ccateccccg atgcaccgaa tatcgccctt tgccccaat 300
 tctgtgcggt tctttcgttt cgaacccccca taaaagact gtatgtgtgt atggtcactt 360
 ggac 364

<210> 8320
 <211> 418
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-E7

<400> 8320

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agagaggggc cgcaaagcta ggcctaactt gaagggtgggc atttgtggag aacatgggtg 120

agagccttca tcggttgctt tcttcgcca gactgggctg gattacgttt cttgctcccc 180

tttcagggtc ccgacgcta ggctagctgc agctcagggtg cttgtctgag gggctgcctc 240

ctcgttggca gcctgctgtt ggtgcatctg gtgattaata atactactat gacagagcca 300

tatgctctgt gaagagtatt agtagcagcg ctcataaaag ctacagttcc atctattttc 360

tcagctatgt aaaacttcca aactgttcat gcttaaaact gagggttttc gtggtgtg 418

<210> 8321

<211> 327

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-F1

<400> 8321

cgggtcgacc acgcgtccgc ggactcgtgg gcgacgcca ggccgggacg gctctgaacg 60

accacttcgt caagctcgtc tcgtggtacg acaacgagtg gggcgacagc acacgcgtcg 120

tcgacctgat ccgccacatg ttcaagacct actagacggg ttttttcccc ctgcttctca 180

tggatggttg cagcttgtgt acgccgacaa taaatctgga tcgcgcgtgc ctctgggtcg 240

ccaggttcat gctgagtcag gacatgtttt gcactttagc atcccttcct gctaccatct 300

gtgaaagaac cgctcgctaa tacggga 327

<210> 8322

<211> 460

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-F10

<400> 8322

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gatgaagcac atcaagaagt acgtcgaaat gatgacgcac gagaacgtct ccagagctgt 120

gctggttctc cagcagaacc taactccgtt tgcgaagtcg tttctcatag agctggagcc 180

gaagatccat ctggaaatth tccaggaggc cgagatgctt ataaacatca aggaacatgt 240
 ccttgttcct gagcatcagg tgctcacaaa cgaggagaag aagacgcttc tggagcggta 300
 caccttgaag gaaactcagc ttccaagaat acagatcacg gatcctattg ctaggtacta 360
 cggcctgagg cgaggccagg tegtgaagat atcaggccca gcgagacggc gggcagatac 420
 gttacatacc ggtacgttgt atgacagaac ggtcagacac 460

<210> 8323
 <211> 359
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-023-Q1-E1-F11
 <400> 8323

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 ttgaccacaa aagtgtttgg agtgcccag ccagggtggt acagggttta ttacatcatt 120
 aataatattc aagagttagt aaccgctctg acccaagagc atccgggtggt gctgatgttc 180
 tgggcggact ggaaccagcc aagcaaggcc acgtactggg atctggccat cgctaaaaag 240
 gatgaggccg tattctgcc a gctggacttt gataagttta aagatgtcgt agagaagttc 300
 agagtgaagg ctctgccgac gttcctcctg atcaaggagg gcgaggatca gcgcaagg 359

<210> 8324
 <211> 401
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-023-Q1-E1-F12
 <400> 8324

caggctacga caagaccaag tacaccggca tcgggtccgc catcgagtac gctgtgtgcg 60
 ctctcaagggt ggaggctctc gtggtcattg gccatagctg ctgcgggtggc atcagggcgc 120
 tcctctccct ccaggacggc gcacctgaca ccttccactt cgtcgaggac tgggttaaga 180
 tcggcttcat tgccaagatg aaggtaaaga aagagcacgc ctcggtgccg ttcgatgacc 240
 agtgctccat tctcgagaag gaggccgtga acgtgtccct ggagaacctc aagacctacc 300
 ccttcgtcaa ggaagggctt gcaaatggga ccctcaagct gatcggcgcc cactacgact 360

ttgtctcagg agagttcctc acatggaaaa agtgaaaaac t 401

<210> 8325
<211> 366
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-F3

<400> 8325

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tggggggtta ttcaaggttt gtggcaaaat gccaaagctct ggaaccgaaa tcctttggag 120
aatgatttcc gtattacaat ttgggggagg gaacttttagg acatcctggg ggaaatgcac 180
ctggggcagc agctaatcgt gtggccttag aagcctgtgt acaagctcgt aacgaagggc 240
gcgatcttgc tcgtgaagggt aatgaaatta tcaaagcagc ttgcaaattgg agtgctgaac 300
tagccgcagc ttgtgaaata tggaaggaga tcaaatttga tggtttcaaa gcgatggata 360
ccatat 366

<210> 8326
<211> 427
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-F5

<400> 8326

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cggaatctc cgcgagagg cgctgcata cgctgatgct ggacagcgtc ggcgcgggcg 120
gtgccgagga ggctgggtggc ggcggtgacg agaggggtgg atgtggcgtg gcgaagccca 180
aggctcgtggt gatggactgc gcggagaggc ggtacacggt ggtgatcctg cgggtgcaggg 240
accggccgaa gctgctgttc gacacgtgt gcgcgtcgc cgacctgcaa tacgtcgtgt 300
tccacggcac ggtcgacgcc gagggagcca tcaaggacaa ggaggcctac caagagtact 360
acatccggca cgtcgacggc caccgggtgc gctccgacgc cgaacggggc cgctcgtcc 420
ggtgcct 427

<210> 8327
 <211> 320
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-F9

 <400> 8327

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 accacgctcg tcaagttcac ctacgacgat atcaaggctg ccaccgacgg attcgccagg 120
 aagagtatta ttggccacgg tggctttggg aatgtctaca aggggggtgct gcgcgacggg 180
 gctgaggtgg cggatgaagcg gttcaagaac tgctccgcgg ctgggggacgc cgcctttgcc 240
 catgaggtgg aagtgggtggc cagcgtgcgc catgtcaact tggttgcgct gcgtgggtac 300
 tgcattgcca ccacacagag 320

<210> 8328
 <211> 437
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-G3

 <400> 8328

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 tgtgaggtgc tcttattcca ccatgaagat atgggggatcc catgggagat tgcgaagctc 120
 ggtgtccggc aagggatgtg gggctgcgtc aagaggatag agcctggcct tcgggcatac 180
 caggttgcca ggaccgctgg agagcctatc taaaacatg ccgccatggc gcatgttacc 240
 accaggttcg atgctgacga gctcgtcacg gaagacagcg tggaggccag ttcattccact 300
 gacaacaaca agaccaccga ggttgagaag ccaaagcact ggacaaaca cataaccaag 360
 gttctcatga tcggtggcgc cgtcgccctg gcttgacact ttgacggtgg attgctgacc 420
 aaggccgcca tattcgg 437

<210> 8329
 <211> 450
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-023-Q1-E1-G5

<400> 8329

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cggtcacggg ccacagcctg ggcagcgcgc tggcgatgct gtgcgccttc gacatcgagg 120
agacgcgcgc gaacgtgtcg cggggcgaca ggggtggcgcc ggtgtgcgtg ttctccttcg 180
ccggcccgcg cgtcgggaac gtgcgccttc ggaggcggtt cgagcgggag ctgggcgtgc 240
gggcgctgcg cgtcgtgaac gtgcacgaca gcgtgcccaa ggtgcccggc gtgttcttca 300
acgagtcggc gttcccggag ctgcctcctgc gggcgcgga caggctgggc ctggcgggcg 360
tgtacacgca cctgggcgtg ctgctgcagc tggaccacaa ggtgtcgccg ttctcaagg 420
agaccctgga cctctcgtgc taccacaacc 450

<210> 8330

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-G9

<400> 8330

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cggctgagat cacctcccgg ggcgccacct ccgacgatcc actcgtcatt gtggactaga 120
tccaactgcg gggagagtag tacgtagtag actagtagtg gtgcagtgca gtctgtagag 180
gagacgagac gtcaggagc taggtagcat cgtcgttgta ttttgttggt gccctgctc 240
tagctagctc gctggctctc gtggatcttg tagccagttt ctttctttca gctgcagacc 300
ttctcttcc tgtggacacg gttgctccat caccaagtgg tgctgatgct accagctttc 360
tgctgtgaca gttcatagta gacgctatca 390

<210> 8331

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-023-Q1-E1-H1

<400> 8331

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aagaaagagc acgcatcggc gccgttcgat gaccagtgtt ccatcctgga gaaggaggcc 120
gtgaacgtgt cgctccagaa cctcaagagc tacccttcgt tcaaggaagg gctggccggc 180
gggacgtca agctggttgg cgccactac gacttcgtca aagggcagtt cgtcacatgg 240
gagcctcccc aggacgcat cgagcgcttg acgagcgggt tccagcagtt caaggtcaat 300
gtctatgaca agaagccgga gcttttcggg cctctcaagt ccggccaggc cccaagtac 360
atggtgttcg cttgtccga ctcccggtg tgcccatcgg tgaccctggg cctgcagccc 420
ggcgaggcct tc 432

<210> 8332
<211> 390
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-023-Q1-E1-H8
<400> 8332

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gagatgaaga aggggctctt cggcgtcatg cactaactca tgcccaaggc cggcacctc 120
tcgctgcact ccggctgcaa tatgggcaag gacggcgacg tcgccctctt ctttggcctc 180
ccaaggaacg ggaagaccaa gctgtccaac gattaaaaca agcttctgat cggcgacgac 240
gagcactgct ggagcgacaa tggcgtgtcc aacatcgagg gaggctgcta cgccaagtgc 300
atcgacctgg cgcaggagaa agagcctgat atttgaacg ccatcaagtt tggaactgtg 360
ctggagaacg tggctcttga tgagcatact 390

<210> 8333
<211> 478
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-024-Q1-E1-A4
<400> 8333

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gctgttggtg atgaagatac tgacatgctt gctgatgtga aacagatggc agctgcagca 120

gctgcagcag gacaagcgag ttcatcattt gagaaccagc tccggccaat tgatagatat 180
gcaatgcgct ttatggaact ctgggatcca gtaattgaca aagctgcttt aaatcatcaa 240
gtaaagtgtg aggaggaaga atgggagctt gatcgtattg aaaaattcaa agaggattta 300
gaagcagaaa ttgatgagga ccaagaacca ctttcttatg aatcatggga tgttgatttt 360
gctacgacag cctatcggca acatgttgag gctttaactc anaagcagtt gttagaagaa 420
caggaaaagc aagctcagga agcatcaca gagttggagg acaagaatga taatatga 478

<210> 8334

<211> 443

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-B3

<400> 8334

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gccgcctgaa cgccgccgga atctgcgagg cctccccgag ctgcgtgcgt cgtcggataa 180
ggcagccggc acggcaatgc cggttccgct tgctccgtac ccagctcctc cggcgccatt 240
cacgccgccc aatggggccc agagccagct cgtctgcacc gggtgccgga acctcctcat 300
gtaccagct ggtgcgacgt cggctctgctg cgccgtctgc agcaccgtca ccgccgtgcc 360
ggctccagga actgagatgg cgcagctagt gtgccgagga tgccaaacct tcctcaggta 420
catacgcggc gcgacgagcg tgc 443

<210> 8335

<211> 461

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-B8

<400> 8335

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actctgacca gggaagtaac tcccttggct gctcagactt gggttgggag aatgatacta 120
agacaccaga catcacatcc attgtccca ttcccactat tgctgaaggc gatgagtctg 180

tattttgtcaa ctccaattca aacagctcga tgggtgcctcc tgtccttgag aacaatgctg 240
 ttgatctcac tgatgggctg acagatttgg aatcctatat gaggtttctt atggatggcg 300
 gtgcaagtga ttcaattgat agccttctga accttgatgg atcacaggat cttggtagca 360
 atatggacct ctggaccttc gatgacatgc ccatcgctgg cgatttcctc tgaggaattt 420
 gaagcttggc cataggacta tgtacatagg gactacggaa t 461

<210> 8336
 <211> 375
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-C1

<400> 8336

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 ttgtggtcac tgtaacatca gtgctgttct tcaggacacc tgtttctcct atcaactctc 180
 tcggtactgc gattgcactt gccggagttt tcctgtactc acagctcaag cgacttaagc 240
 ccaagccgaa gacggcttaa atagggattg tattttccat ctctttgtgt taatggagtt 300
 aaacacttct atgtttcagg tgactgcatt ttaaaagatt tgtgcttata acaacaaatg 360
 aaaaaccgca aacgg 375

<210> 8337
 <211> 458
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-C6

<400> 8337

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 acgacaaggc caagggctgg gccggcatcc atgcgatccc aaggaagatc tggctggacc 120
 ccaccgggaa gcagctgctg cagtggccca tccacgaggt cgagaagctc agggggaag 180
 ccgtcagtgt ggacgccaa ctggtcaagc ccggcgacca ttttgaggtc acaggcatcg 240
 caacttatca ggtagtttt atactctagc tacgttttga attcgatgga tcataaaact 300

gtttttttttt acttagtaac tagtggcaag ctaaggccgg cggtaacatg tgtgcgtgcg 360
cacacagctg gtcacctgtc aagcttcgat tcgcagcttg tcggtagtat acactacact 420
agtactagca gggatatctgt ctagccagcc cagctgcc 458

<210> 8338
<211> 124
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-024-Q1-E1-C8
<400> 8338

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gacg 124

<210> 8339
<211> 403
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-024-Q1-E1-D1
<400> 8339

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tcgactcgtg gggaagattc gctctcgccg gcgtcgacgg cctaggggtc gaggaacgtc 120
cgtccgtccg tccggtgaag gagcggtagg gaggcggaga tgatcgaggt ggtgctcaac 180
gaccgcctgg ggaagaaggt gcgggtcaag tgcaacgagg acgacaccat cggcgacctc 240
aagaagctgg tggcggcgca gacggggacg cgccccgaga agatccgcat ccagaagtgg 300
tacaacatct acaaggacca catcacctc aaggactacg aggtccacga cggcatgggc 360
ctcgagctct actacaactg agccgcccgc cctctctccc tct 403

<210> 8340
<211> 348
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-024-Q1-E1-D10

<400> 8340

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gtttggagct caccaaacca ggccgagcgg cggcggcccc agatcagtga gagcttatgc 120

gaagggagac gaggagggcg acaagcagtc cctcttcgga agcatcaccg aggcgctgga 180

cttctcgcag gtccggtcgg agaaggacgc cgagctgctg tacgaggcca gggagtccac 240

cagaggtgga gggaggatga cgaggagca gtacggagca cttaggcgga agattggtgg 300

cacctaccag gatttcttca agtcatatgt tgaagtcgac gggcaata 348

<210> 8341

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-D2

<400> 8341

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tgttcggcct ccagcggttc cgcgagtgcg agtcatcca cggccgctgg gccatgctcg 120

ccaccctcgg cgccctctcc gtcgagtggc tcaccggcgt cacctggcag gacgccggca 180

aggtggagct ggtggacggg tcctcctacc tgggccagcc gctgccgttc tccatctcga 240

cgctcatctg gatcgagggtg ctcgtgatcg gctacatcga gttccagcgc aacgccgagc 300

tcgaccggga gaagaggctg taccgccggc gctcccactt cgaccgctc ggcctggcgg 360

ccgaccctga gaagaaggag cggctgcagc cggcggagat caagcacgcg cggctcgcca 420

tggtc 425

<210> 8342

<211> 448

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-E1

<400> 8342

gggccgagcc acgcgtcagc ccacgcgtc gccacgcgt ccgcgaacag tccagaaccc 60

actgctcgaa accgcagcca ctggccagtc gatgcccatg actgcggtgc ccaggaccgg 120

ccccggttgc ctgggggtgc cgccggctca ggctctgtcg agctcactag ccgggggttca 180
 aggcgccccg aagcgactgg gcgtatcgaa gccgtcgtgg atcgttcgca ctgagtcaaa 240
 cgtgaggatg gagagagcaa aacgacctga tcctccttgc accatctgca aaggcacagg 300
 gagaatagac tgccgcaact gctttggtcg aggaagaaca aaccatgccg atgtggccat 360
 gcttccgaac ggcgaatggc cacaatggtg tcgaatttgt gggtggaagt ggactggatt 420
 actgcctccg gtgccatgga actggtga 448

<210> 8343
 <211> 394
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-E11

<400> 8343
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 gatcaggaga agaaaaagca tacagtggca ttccttcttc tcacgcatgg ggacgcatgg 120
 gcaattccaa aatccttgtg ctacctccgc ccgttgtcga cagcgaccag aggacgcca 180
 cgcagatgcg ccgtccgata ccatgccgcg ggagcggatg cctccaatga taagtactg 240
 gggtcatgc acaagttctc cgagcagtac gcccgccgct ccaacacttt cctctgcgcc 300
 gacacaacag tcaactgtcg catcatcaac ggacttgctg atcagaagga tactcgtgaa 360
 cccctccat gaccttgtag gcattacgat gaca 394

<210> 8344
 <211> 387
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-E3

<400> 8344
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 caacttcaag gtgacgcccc agccgccgct gtccaaggag ttccgccagc agaacaagcc 120
 cgccggactg gtcaagctga acccggcgag cgagtaccgc cccggcctgg aagacacgct 180
 catectcacc atgaagggca tcgccgccg catgcagaac actggctagg cggcttctct 240

tcactcacct gcagagtgc cgcgaataat cagcttccgg atggtggcgt tttgtcagtt 300
 ttggatggaa atgccgaact ggcagcgtct gttttcccta tgcataatgta atttcctgcc 360
 tctttatatt cactcttggt gtcaagt 387

<210> 8345
 <211> 279
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-024-Q1-E1-E8
 <400> 8345

cagggttacgg tcaggagttc ccgggccgac ccacgcgtca gagcacaaca agtagtcaaa 60
 gcatctagct cgttacaagt ggctcttgct gcctacaatt ttgccttctt ccaagtcttg 120
 tttgaagttg ctctctgcga agagccggtg gagaagttaa taccgtctag caatggaccg 180
 ggtgacgaca ctggcttctc agcgcgcggt ggtcatcttc agcagcagct cctgctgtat 240
 ctgccacacc gtgacgcgcc tgttccgcga gctcggggt 279

<210> 8346
 <211> 291
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-024-Q1-E1-F1
 <400> 8346

agcccacgcg tccgcccacg cgtccggaag gagaaacata tggggagttg aacgagtgc 60
 gcaacttcac aaccagttac ctgaccagca ttcttttgct tttccctgt atattttcca 120
 ttcagtgtca ttcgatgggt ggtgttgggt ctcttttagac aaactgggga ctgttgctta 180
 tcctaaaaat tcgattgtat tgtgtggcat gaaatgatcg atgtcaaaga atattttgaa 240
 catgctgcc aactaattata cttttcatat gaacatcata aagaaagact g 291

<210> 8347
 <211> 172
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-024-Q1-E1-F10

<400> 8347
aattcccggg tcgacccacg cgatccggag ttaatgagaa tactgatgga tgttaaggga 60
ttaagctgga gtgagggcatg gagtattaca gaaagaaccg tggcatacac taaccataca 120
gtgcttcctg aagctccaaa gaaatggggc ttgggcaaaa tgcaaaaact tt 172

<210> 8348
<211> 301
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-F11

<400> 8348
cgcggaacgcc gcggctggcc gcgtgggagg accggttccg cgccgccgac gtggccaagg 60
gcgtcgtgcc cgacgacctc cacaagatgc gcgcgttccg gcagaccctg cgcgctatga 120
actacgccaa gtgagagtgt ttcgtcgcat gaacgtgtgc cgtgccgtgc acgacctatg 180
atcagttcat gtcgatacgt ctatcactca gttttgcttc ttccgtcaat aatcgggtgtg 240
ctgaatacat gtacaccagc tgcctataat tttgcttctt tcttccaata cctccgtttt 300
t 301

<210> 8349
<211> 447
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-F6

<400> 8349
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aggaagtctt ccttcattgt cccatctgct gacacctatg ctctgtgtgc cgttcgtcac 120
attggatacg agcctaggtg cacaccatac tggccacact ctgtcgtgtg gttcttgatc 180
tccattcttc ccgagtcctt tatcgacagc gtgcgccttg gcatgtgcat taagatccgc 240
aagaaggggc tggccaagga cgccaagaag aaggcgctgt gattgatgtt tcagaatgca 300
tgttcagatt cgcacatttc ctcatcacct gtagtagaca cgtgccttgc tgtagtcact 360
ttattagcta ccattgcctc ctgagtctgt taagaatcga gaatgtcatt gtttcattccg 420

cggttatgat gatgaaaaat acgattc

447

<210> 8350

<211> 454

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-G2

<400> 8350

gggtcgagcc acgcgtccgc ccaagcgtcc ggcagaggtc ccgcggcttc ggcttcgtca 60
ccttctccac ggaggaggcg atgcggaacg ccatcgaggg catgaacggc aaggagctgg 120
acggccgcaa catcacgctc aacgaggccc agtcccgcgg cggccgtgga ggcggcggcg 180
gtgggtacgg tgggtggcgt ggaggcggcg gctacggcgg tggcggggcg cgtgatggcg 240
gcggcgggcta cggcgggtggc ggcggtacg gtggcggcgg cggctacggt ggtgggtggcg 300
gcggctacgg cgggtggcaac gtggccgggg ctacggcaac tccgacggga actggaggaa 360
ctgagcgggtg gggcccgcgc gggcaagtta tcctgttcgc tgccgtgatg tttaccctag 420
tccagagggt ttatcttcgt tcgtctcgtg tttg 454

<210> 8351

<211> 468

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-024-Q1-E1-G4

<400> 8351

ggtcaggaat taccgggtcg agccacgcgt caggggagcc aatggagtcg gtgggtcggg 60
gtccgagcgg aagccgctgt cagaggtggt cggcgactgc gtccagcgt ggttccagga 120
cgcgtacaag gaggcgcgca aaggagacat cgccaaccag gtgctttag cgcatgtt 180
cttctcgggt tatgggacct ccaagaacga gtacaaggga aaacaatgga tggatagagc 240
atcaagggtc aggtcttcg ctttgaagggt tggcatgaaa cgtccaggat acaatgcaag 300
tgactcagac tctgatgacg atgcanatga tgacgccaac caataacact caattacaaa 360
ttgagttatt agttaggaga ttcacaggga attttccttg gtgctgggac ttcagggtcg 420
aattacttgg tggtttatgc atttattaac actgtgtttg aattgtga 468

<210> 8352
 <211> 365
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-024-Q1-E1-G8

 <400> 8352

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aaaaaatatc acaccgttca tcagcatact tttaagatca cacatcagta caacacattc   60
acatgaagct atatatatgt aacaggcatg cttaatacta actaactagt actgtatgag  120
acaacgatgt atacacgcat gttgatcact acggggacag tagagagaca gtgtcaggtc  180
gtcggttctc tgcagttcag gattccacgt agcaggatct taacttgatt aactggcact  240
tggcagttag cttaatccgt tgcacgtcgc tacgtgtcca cgttaggcaa ttgcgccatc  300
tcatcccaat tgcacctgag ccttgccctg nagagggcgt tccactcgac gagccgcagc  360
aagaa                                                                    365
  
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<210> 8353
 <211> 332
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-024-Q1-E1-H11

 <400> 8353

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gggtcaaacc ttttcctaaa tgattttggt ggttgaaatg cccaacacan ataattggac   60
taactagttt gccctagatt atatgtccta cagggtgcaa aggttcacatc tgtcggcggt  120
tcgaccccg gggtccttgg accgacgagt aaattgtcgc tgcgtgtccc agcccagatg  180
ggtcngcgcg agacggaaca caacggggga aaacagtaag gggaaaccgc ggtgagcccc  240
gtgtcgaccg ggagtacgac atggtcatcg tcccgccga cggcggtggg tgcctctccg  300
gctctgactc ggacgactcc gactggtcca tc                                                                    332
  
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<210> 8354
 <211> 427
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-H12

<400> 8354

aattcccggc togaccacg agtcagcca cgcgtccgcc cacgcgtccg gtctcacttt 60
aaaagctcta aaaggaaact tggcatctgg aggagagtca aatgagcagg ctgggatcaa 120
cgtggagaac tttagatctt ctgtatttcc ttcccggcag ttgtctggtg aggtaaaacc 180
attttatcca aatcctggaa tgcacagtga gaatgtttgg attcaaaca ctcagacaaa 240
cgagacaatg aagctgggca acgcaactta ctacagacag cttccaggac atagcactga 300
gtcaataaac caaagaagta caggaagttt ccagagttcg gtgagacgtc aatctttccc 360
accttcgagt tacaagaaat gagattcata ccagtagccg tcttgatgta taaaggaaag 420
gaagaaa 427

<210> 8355

<211> 469

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-H2

<400> 8355

cggtcaggaa ttaccggggtc gagccacgcg tccgcggaac gggacgaata ttatctcaaa 60
aaaaagtctt gagtcccccc tctccttccc cttcccaacg ctctcgctgc agaggaaagg 120
cgaagatggc gatgaccgctc gaagtgcttg ctgcactcgc gttcatgttt tccacgagta 180
ttctactgca gatactggca tgcgctttgt acaacaactg gtggcccatg ttagcagctc 240
tcatgtacgt ccttgtacca atgccatgcc tgttttttgg tgggtggatcc acacacttct 300
tgaccagcag agaaggtgga ggggtggatta atgctgcaaa attcttgact ggtgcgtcgg 360
ccatgggaaa ccttgctatt ccagcaattc tgaggcacgc tggcttaatc gagaccgggg 420
ccatgttcat cgagttcacg tccttcttca tccttgatat cacagtgtc 469

<210> 8356

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-024-Q1-E1-H7

<400> 8356

aggtactggt atagaattcc cgggccgacc cacgcgtcag cccacgcgtc cgcaagaagc 60
gcagcgccca tggccatggc cacgcaagcc tccgcgcga cgcgccacct gctggccgcc 120
gcctggggcgc cggcgggcga gccgcggcag ctgagctcgc agctcgcgct gccgtcgtcg 180
tcctcccgcg ggccggcccc gctccgcgcg tccaccgagg aggcggtgga ggcgccaag 240
gggttcgtgg ccccgagct ggacccagc atgccgtccc cgatcttcg gcggcagcac 300
gggcgggctg ctccgcaagg cgcacgtgga ggagttctac gtcacacgt tgacgtcgcc 360
caaggagcag gtgttcgaga tgcccaccgg cggcgccgcc a 401

<210> 8357

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-A12

<400> 8357

cacgcgtcag ctattcccc gttgaatttc aatttctggc caactttgaa ggtggtcca 60
atgggcaact tggtcggcaa ctctggcaaa gtctggtaat ggaaaggaa aacctgaac 120
ttgaaaggaa accgggttac aagcccgtt ttgggcccc aagtcaaca ccaaaaagg 180
ctcctcccc taaaaacaac attcctccg gttcccttc aagccggcaa agcggaac 240
gttaacaaag gtaatggcat cgtgaacaac aactggccct ggcgggcgac gtggggctga 300
cggcgagac caagttcacg gacctcggc cgcactcgt ggacacggtg gagatcgtca 360
tgac 364

<210> 8358

<211> 338

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-A3

<400> 8358

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cgctcgaggt cggctccgac ggcacgtca agttcgagga gaaggacggc atcgactacg 120

ccgccgtcac cgtgcagctc ccggggggcg agcgcgtgcc gttcctcttc accgtcaagc 180
 agctcgtcgc caccggcaag cccgagagct tcggcgggcc cttcctcgtg cccagctacc 240
 gtggctcctc cttcctcgac cccaagggcc gcggcggctc caccggctac gacaacgccg 300
 tcgcgtcccc cgcggggggc agaggtgacg aggaggag 338

<210> 8359
 <211> 380
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-025-Q1-E1-A5
 <400> 8359

ccggctcgac ccaagcgtca gcaagaaaac aacgcagagc tcaccaggga ggctgttgat 60
 gttttcattt ggtgcttaac tcaaaatgca gagtcttaca agcagtggga aagaatttat 120
 cttgaaaata ttgaagccag tgttgctgtc ctgagcaaag ttgtgattga ttggagggat 180
 gtgtctccta agctcagttc tgaagctctc aaggcaacag tgaagaactt taaggctaag 240
 aatgaggctg cgctggagtc cacaacagat gctggaaagc aggcatttat caaagaagca 300
 gacaagcact gcaaggcgat ctttggaaag ctgaccogtg gcgccacctg cctgaagagc 360
 agcctggtgg tcacgcgct 380

<210> 8360
 <211> 350
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-025-Q1-E1-A6
 <400> 8360

ggtacaggtt aggaattccc ggctcgaccc acgcgtacgg gagggactta tgtcaccaca 60
 aacagaaaact aaagcaagtg ttggatttaa agctgggtgtt aaggattata aattgactta 120
 ctacaccccg gagtacgaaa ccaaggatac tgatatcttg gcagcattcc gagtaactcc 180
 tcagctcggg gttccgcctg aagaagcagg agctgcagta gctgcggaat cttctactgg 240
 tacatggaca actgtttgga ctgatggact taccagtctt gatcggttaca aaggacgatg 300

ctatcacatc gagcccggtc ctgnggaccc agatcaatat atctgttatg 350

<210> 8361
<211> 327
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-A7

<400> 8361

aattcccggc tcgaccacac cgtacgcttg aaaggcaacc aagtgatgat gaaccatttt 60
ctgggttagc tttcaagatc atgactgacg cgttcgtggg gtcactaaca tttgttcgca 120
tatactccgg gaagctgata gctggttcat atgtttctca tgcaaataaa gacaagaaag 180
agagaatcgg aaggcttctt gagatgcacg caaacagtaa ggaagatata ccagttgctg 240
tgacaggtga catagtagcg cttgctggtc tgaaagacac aattactggt gaaacactct 300
gtgacccaaa caagcctgta gtgcttg 327

<210> 8362
<211> 395
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-B5

<400> 8362

aggatatagg taggaattcc cggctcgacc cacgcgtacg accaagggat actactgtcc 60
tgccatgtag gcatatgtgc atgtgcagtg agtgcgcca ggtcctgagg taccaaacca 120
ctcggtgccc catctgcagg cagcctgtgg agcgtctcct ggagatcaaa gtgaacaaca 180
aatctgaaga tcagcagcag acgcccgaat cgccaccgag cccagacctg gctccgcagc 240
aggaaggggt gtagccgtga tcaaagtcag ttctgaagta tttggcttga atttgcggac 300
cttcctgaag gtttgttctc tcatttgggc aacggggaat gcaactggta cttttacctt 360
tagcatatgt aagcttctgg catcgcatgg ctttg 395

<210> 8363
<211> 371
<212> DNA
<213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-025-Q1-E1-B7

<400> 8363

ttccccggctc gacccaaacg tccgcccacg cgtccggaag atgggacagt gattgaaagt 60
 gaaactgcga aagatgatgc cagaacatat ggagttaatt tgtcagaatc agatgctgca 120
 gttcgtattc agtctgccta cagagggtat gatgttcgaa aatggcaacc tttggataaa 180
 ctctggaaga tcaagcatgt gcatgaacag atgcaagttg tgaggaagca ttcaatgcct 240
 tttagattct tgcagtaagc caacacaaaa agagcaagtg gccatagggtg aaactattat 300
 gaatttactc ctgaagcttg acgcaatcca gggcttgcat ccaagtgtaa ggaagctan 360
 gaagtctgtt g 371

<210> 8364
 <211> 344
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-B8

<400> 8364

aattccccggg tgcaccaca cgtccgcca cgcgtccgct cgctcgcta cgtacgtctc 60
 tctctctccg ccgcgacccc ccacaagcgg cgccggcgcc ggcgctgcag ctaaaccaaa 120
 ccctaagcca cgggcaccgc cctacgccgc gggctctccg cgatgcgccg gtgcgcggag 180
 gcgatcgca gggcgcgtgt cgagttctc gaagccgtca tcttgacctg tctccgctcg 240
 tgcttcggcg cgcgcccccg ccgcggctcc ggccgcgag atgcgctcgt gcgcggggat 300
 cgggccgcgg aggtcatctg ggatgaggaa agcttggtaa ggga 344

<210> 8365
 <211> 113
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-C2

<400> 8365

aggtaatcta tgatggcaat gtttgcttgg tcatgaagta ttattacttt cgttgaaacc 60
 gtgatgctat taagacttaa ttttttttat ggaacatcga atgtaaggca aaa 113

<210> 8366
 <211> 365
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-C6

<400> 8366

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cccgggtcga cccacagcgt acgcggacgc gtgggcggac gcgtggggcc gcgggttaac   60
cttcccttct cgctgccgtg ctctgctcg tgcgcgcgtt cgcaatcgta gcgctgggggt  120
tgagccgcga gtggataaac cctagccggt ggtgtagctg ggttgggtggc tttgatgccg  180
gcgacggccc gcttgtcccc ggaatggagt gaggtgacga aggctgccat gggctctaac  240
tatgccacga ttggattata ggatagtagc tggcagctac cagtttccta gaaccaattt  300
gtggatagcg agaggagtga ctgttgttca gtactttcac ctcgatcatg ggtggtgtct  360
gctca                                                                    365
  
```

<210> 8367
 <211> 380
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-C7

<400> 8367

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gaattcccgg ctcgacccaa gcgtacgccc acgcgtccgc ccacgcgtcc gacaacagca   60
agggaagggtt aggtttcttc ggcaccatgg tgcattcttc acttgctggg gagaacgttc  120
atgagattta gaggcattgt ctacaaatgc agttctggac ataataactg aatttgagca  180
tcgcattctt gtgctgctga atcttatctt gattatggct tcggcaacat cctggaagag  240
gaatttatgg tcaactgaga tcattctcaa gaccgagagg gctaacagaa aacatcagat  300
ttcagcatcc aattactctt gactaacgtt ccactctttg caaaaccatt gtgccggcaa  360
ggagggttac tatttttaggt                                                                    380
  
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<210> 8368
 <211> 357
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-C8

<400> 8368

cccgggtcga cccacacgtc acgcggacgc gtggggcgccg atcacacatt ggacttgcac 60
tggtgcttgc tcataattac tagttcatca gcaaacaaca aacaatggca ccgaggctag 120
cgtgcctcct agctctggcc atggcagcca tcgtcgtggc gccgtgcacg gcccagaact 180
cgccgcagga ctacgtggac ccgcacaacg cggcgcgcg cgcagtgggc gtcgggcccgg 240
tgtcctggga cgacaccgtc gccgcgtacg cgcagagcta cgcggcgag cgccagggcg 300
actgccagct gattcactcc ggcgggccct acggcgagaa cctcttctgg ggctccg 357

<210> 8369

<211> 334

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-C9

<400> 8369

cgacccacgc gtaagcggac gcgtgggaaa aaaaaatgag caaaaagaat aagtctagga 60
gattgacgat caatgggaat gatggttcat tccacatgaa tgtaaaggc agatgccctc 120
taggctgtgg gctaatttca cttgactggt cggctggatc ccttccgtga cttagaaatc 180
tgcgaaagtgg gggctcttgt tctacgtgct acagattggt atatcactag ctggcctctg 240
tcttaactgg ttggcacgaa ttacccttct caacagtggc gctaaccga atgtggaatg 300
ggacgttcca tctaccagtt cattgatctc cctg 334

<210> 8370

<211> 230

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-D11

<400> 8370

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gtagccggac cgccatggat ggcaattcgg taaccaacgg tcaagaacct aaacctcccg 120
gaattgtaca aaacatccat aattacaatg gtagaaacca acttggagga aacctaataa 180

aaacttcccc gtaaatggaa aaccaatcgg ttaatgaaaa aaaaaataaa 230

<210> 8371

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-D3

<400> 8371

tccccggtcg acccacgctg aagcggacgc gtgggctgct gccagttgct cacggatctg 60

gaggaggctg aggagggtcaa caagcagctc gatcagatgg gttacaacat tggaacacga 120

ttggttgatg agttcttagc aaagtcaaat gtatcaaggt gtgttgactt caaggagact 180

gccgatgtta ttgcgaagct tggcttcaaa atgttcttgg gcgtgactgc aaccgtgacc 240

aattgggatg ctgagggtac aagttgcagc cttgtcctgg aagacaaccc tcttgttgat 300

ttcgttgagc tccctgacac ttgccaaggc cttcagtatt gcaatttggt aagtggagtt 360

attaaggggg ca 372

<210> 8372

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-D4

<400> 8372

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ctaacagtta tcagggtgct tccgaaccca ccgggtgtcag ccgacgtctt gcatcagtgg 120

aaaggattct gtgctctaata cgccaacgct tactatgtca aaggaatggc atggttgcca 180

gtgaaaacct tgcagctgga acagatggct gtcacaggaa gttcagagaa accatcagta 240

gttgctagcc gcatgcagtt agttttcagc acattagagg tagtcagccc acagtggcca 300

agagtgtgat tagatgaaag caataccatc aaacaaaggt ctgcagtttt attctgacca 360

aaagatatgc atgtccaagt tagcaagttc aaac 394

<210> 8373

<211> 449

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-025-Q1-E1-D5

 <400> 8373

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 ctcttcaacc ctataggctc caacaagcaa tcgcagcaag caacatacct ttatcacct 120
 tgtttcaaca atcgccagcc ctatctttgg tgcagtcatt ggtacaaacc atcagggcac 180
 agcagctgca gcaactcgtg ctacctgtga tcaaccaagt agctctggca aacctttctc 240
 cctactctca gcaacaacaa tttcttccat tcaaccaact gtctacattg aaccgtgctg 300
 cttatttgca gcaacaacta ttaccattca gccagctagc tactgcctac tctcagcaac 360
 aacaacttct tccatttaac caattggccg cactgaaacc cggctgccta atttgcacca 420
 ccaattacta ctaccaattt agccagcta 449

<210> 8374
 <211> 417
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-025-Q1-E1-D6

 <400> 8374

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 ggacaacctc atgccagctg gtcaggttgt tttccgtgca aaagttggtg aacactatcg 120
 gctccctcat aagggaatta tccctagaga acttggagtg attgctaggt acaaggggca 180
 aaggaaaatt gcagatcctg gtttccaaaa ccctcaatgg gttgacgggg agcttttgat 240
 actagatgga aagttcatca gagatgggtcc tgtgatagct ttcttttact ggacatctaa 300
 tgttcatctt ttcgaattct ttagacagtt gaagcttcc gactagttcc cttctaaaag 360
 tagttaaagg ccattataat ttcagcatag ctgcgtttgg aaccaanccg aatttcc 417

<210> 8375
 <211> 382
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-D7

<400> 8375

gaattcccg ctcgaccac gcgtacggga gcagatcagg atccattaac acccctacgt 60
acgcctttcc tctggaaacc cttctctcgc ctgcctctcc cccgccgcgc cgccacttcc 120
cctctcccg ctaactccggc ttccgcgcga ggtcgagcta gcgtttggag ttctcgagac 180
ctgctgtgat ggcgacagag caagcggcgg agaactacac ggtggaggac ctgctggccc 240
tgaaacccta caaccccgac atcctcaacg acctcgagaa gttcgtcaat gagcaggtct 300
catctcagac atataacttg gatgcaaata tcagccttct tcgcttgtag cagtttgagc 360
cagaaaggat gagcatacag at 382

<210> 8376

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-D8

<400> 8376

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gatccaggac aaggagggca ttccccaga ccagcagcgg ctcatctttg ctgggaagca 120
gcttgaggac gggcgacgc ttgccgacta caacatccag aaggagagca ccctccactt 180
ggtgctgcgc ctccggggag gcatgcagat cttcgtgaag accctgaccg gcaagactat 240
cacccttgag gtggagtctt cagacaccat cgacaacgta aaggccaaga tccaggacaa 300
ggagggcatc ccaccggacc agcagcgttt gatcttcgct ggcaagcagc tggaggatgg 360
ccgcaccctt gcggattaca ac 382

<210> 8377

<211> 427

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-E1

<400> 8377

aagcaaagga ggatttgagt ttgcacaag tgatgaggat gaaccagaga atctgtttcg 60

taatgttttt cgagaccagc acacatatta ttggtctttt tcatctgata attttcagag 120
 gaactccaaa cgtgctcgct cacaaaaatc cagaaactgg agttttgaaa cagacgagga 180
 ggatgaagta tcagctccat cagaggtatc ttgggcacga caagctcttg ggttgagcac 240
 ttctgggccg cttaaacttg aagatgttaa aagcgcatac cgagcatgtg cacttagatg 300
 gcatccagat cgccacaatg gatcatctaa gtctacagcg gaggagaaat tcaagcattg 360
 caatgcaaca tacaagacct taaggtgaaa ttggggccgc tgcatagata attttgaatg 420
 aagatgg 427

<210> 8378
 <211> 388
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-025-Q1-E1-E5
 <400> 8378

gaattcccg ctcgaccac gcgtacgaaa tctctaatac tagatgggtg ccggcgctgg 60
 cgctgctcct gggacgacga gaacacgacg atcagccgcg cgcgtctata tactgcagta 120
 caagaacacg acggaggcgg cggaggacgc ggcgcgcatac atcctccggc agtgcgcgct 180
 gtccggcacg gtgaagcgcg tcattccacac ggcctcggtc acggccgctg cgcgctcaa 240
 ggaggacggc agcgggtaca aggacttcgc cgacgagtc aattggacgc cgctcaacct 300
 ctctacgaa ttcaccaacg cttacctgga cgtacgtaat acagtgctat ataggactaa 360
 tctatatatt gactactcat gtgcatgc 388

<210> 8379
 <211> 468
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-025-Q1-E1-E6
 <400> 8379

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 gccccgagag cgggtttagt tagaggctac gggcggtcgg gcgcggcggc ggcggcggcc 120
 atgagcagcg ggagcgagag cactaccgcc agcaggtggc ccgagctggc cacgctgcgc 180

gcgctggcgc gcgacgccgc ggagcagctt cggctgccgc gggccggcac gtcggcgtcg 240
gcgtcgtcgc cgtggcgcg ggcgcgaggac cacctccacg gcctcggcaa gacggccaag 300
gtgatgcacc tgctgctctg gggacccaag tgaagcggcg agaggccacc gtaccgccgg 360
gctctcccgc tggcggttgc cgttttgctc tgcttgaat ccgcccga cgggacggta 420
cggtagctat atattcacct acatactacg acgtgcacct gtactacg 468

<210> 8380

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-E7

<400> 8380

gaattccccg ctcgaccaa acgtacgcc acgcgtccgc ccgaagcact ggtcattgga 60
gtagtcgcct tgttggtatt cggccccaag ggtctagcag aggtagccag gaatttgggg 120
aagactttgc gtgctttcca accaaccatt agagagctac aggatgtatc aaggagttc 180
aggagcactc ttgaacgaga aatcggaatt gatgaggttt cccaatcaac gaactatagg 240
cccacaacca tgaataacaa ccaacaacct gctgccgacc caaatgtcaa gcctgaacca 300
gcaccttata ctagcgagga actaatgaaa gtaactgaag aacaaattgc tgcacagct 360
gctgctgctt ggaatccaca ac 382

<210> 8381

<211> 441

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-E8

<400> 8381

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cagagctctg cacgtactga acctgaacac acagtagagt agcgcaacgg atctcgaaat 120
ggctgcgagg cttgcgtctc tcctccttgc cacgaccttc ctctctccg ccgcccggga 180
cgggggcagc accaactgcc cgtcgccgcc aatgaccccg accccgacga cgccacagcc 240
tcctccgtcc gacggggggc gggggggggg tggtaacggc tccgccggca gctgcccgat 300

cgacgcgctg aagctcgagg tgtgcgcgaa cgtgctgaac ctgctgaggc tgaacatcgg 360
 cgtgccagac gacgagcagt gctgccgttt ccggaggggt tccccactt cgacgccgcc 420
 gtctgctctt gcctcgccat c 441

<210> 8382

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-F10

<400> 8382

gtcaggaatt accggtcga gccacgcgtc agcccaagcg tccgccacg cgtccggtat 60
 cctctcagtt gctgccattg ataagggcac tggaaagaaa caggacatca ccatcactgg 120
 tgctagtacg ctacctaagg atgaggttga gagaatggta gaagaagccg ataagtttgc 180
 caaggaggac aaagagaaga gagatgcaat cgacaccaa aaccaggcgg actcagtggc 240
 ctaccagact gagaagcaac tgaaggagct tggcgacaaa gtccccgctc ctgtgaaaga 300
 gaaggtggat gtgaagctcc aggagctcaa agacgccatt tctggtggat caacacagag 360
 tatgaaagat gccatggctg ctctgaacca ggaggtgatg 400

<210> 8383

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-F4

<400> 8383

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 cggaggatga aaatgccgag tctgctacag gagataattc tggcttccaa gaaaacaaca 120
 cgggttctca tatggatctg gatatgatga atgactatga agtgaaggaa tgcaacgatt 180
 ttgggagtgc gattcatggc gttgatacag attttctgaa ctatggtgac gacgacaacg 240
 acgacgactt cgacgacgac ttcgagccaa atcccagcga gttccagtct ctcgacaaca 300
 gcggctggtc ttctgcacc aggggtgtcg cgagatatct caagactctg ttcgacgagg 360
 actccggtct ggggaagaag aacgtcccca accaacaacc ggggtgcccg gaagacgcgg 420

aaggaagcgt cgaggatg

438

<210> 8384

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-F5

<400> 8384

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tggccgccac cgcgccctcc gtcgcgtcgc cgctcccgcg caagccggcc acctccacca 120
cctcgctcga ggtcgtcgcg gcggggaaga agggctacaa gatgaagacg cacaaggcgt 180
cggcgaagcg gttccgggtg acggggaggg gcaagatcgt gcggcggtgc gccgggaagc 240
agcacttgct cgccaagaag aacaccaagc gcaagaagag gctctcgaag atggtgcaag 300
tcaacaagag tgactacgac aatgttacgg gtgcactgcc ctacctcaa gtgaatagga 360
aagcaaactg agagctacgt ggtcttc 387

<210> 8385

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-F6

<400> 8385

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tctatttttc ttgatataatt tggactcaca tttttttgtg aataatttta taatgctatt 120
ttgtcattac tgtctaaatt ctaaaatggt cttgtgagac ttcattgggt gtgcacctga 180
ttacacttta tctggcttct tttgtcatgc atagttaa at tcaaactgt attgtattag 240
tttgtatttc atataccgta cacatgaagt ttgagtatga actggcattt ccatcagcat 300
tacagttgct tacttggtgct atctgtttgc tgggtgcagga agctgaaact gctataactg 360
aaatgactgg aaaatggctt ggaagcagac aaat 394

<210> 8386

<211> 271

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-F7

<400> 8386

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ccgccccatgc gtcagcggac gcggtggaaa aaatatttgt gaaaaaatta aaaaatgtaa 120

ttttgtcatt aaaagtataa attataaaaa gtgaaatgat gaaaattcaa tggaatgtga 180

aaatgaaaaa aaaataaaaa ggcatcattt ggggggggat atttaaatgg ttcaatgcta 240

atgtagtagt ttgtaaaaca taaaacgttt t 271

<210> 8387

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-F8

<400> 8387

gtaagggtcag gaattcccgg ctcgaccac gcgtacgca tcgtattcgt atccgcggaa 60

caagcagcga aggatcggag cctatccaat ggccgagggc aagagcagct ccggcggcga 120

cctgtttctcc agcggcaagc tgggtggcggg ggccgccgtg tcggtgttcc agcagaagag 180

cgtggagaac gtcgacaagc aggaggtcgc cggcgcggcg gccgagctcc tgcacgcggc 240

gtccgcgtac ggtaagctcg acgacaagcc ggccgggcag tacgtcgaga aggccgaggg 300

gtacctgaag gagttcagcg cgggacacgc caccgagcag gagcagcctg cggcggcagc 360

aggcgacgac gcggcgccca ag 382

<210> 8388

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-F9

<400> 8388

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acatgcgtct gtgcttagtt tacatcgacc gcttaaagca agcagccatt gacattgatt 120

gatgagcaca cacatcgatc atgagcatac cccggctggt gcaactacta aacgcctacg 180
 atttgaacaa gtagagtaca gggaagacca aactgttcac tccacggacg gacggacgga 240
 eggaccaatg gatgggtctg aaggtagtag acatgtacgg cgttgctcag tcagttaatt 300
 gccggggaac aagttcgtgg cgtatgccca ggcgttggtg gcgacggggt cggcgacgtg 360
 gtcgaagagg ttctccatgg ggccttgcc ggtgacgatg gcctgc 406

<210> 8389
 <211> 364
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-G5

<400> 8389

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 aagcgtgatg agctgaccct ggagggcatc aaacaattct ttgttgctgt tgagaaagag 120
 gagtggaagt ttgatacact ttgtgatctt tatgatacac tcaccatcac ccaagctgtt 180
 attttctgca atactaagag aaaggtggat tggctcactg aaaaaatgcg taaaataaac 240
 ttcaccgtat cagctatgca cggtgacatg cccaacaag aaagggatgc cattatgggt 300
 gagttcaggt ctggcgcaac tcgtgtgcta ataactacag atgtttgggc tccaagactg 360
 gacg 364

<210> 8390
 <211> 380
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-G6

<400> 8390

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 tctccacgac gacttgccgg ccggccgtct tggcgactgc cgcggcccat aagaggagcc 120
 tgctgctggc gacggcctcc gagacgaggg gagtcgcgcc ggtgaggtcc agcgggatcg 180
 agaccagcac ggtgggtctg ggatgtgagg ccgtcaccgg gcaggtcacg gaggtcaaca 240
 ttgacacttt ctggcccatc gtctaggccg ccggcgacaa ggtcgtcgtc ctcgacatgt 300

acatcgaatg ctgcgggcct tgctatgtga tggctccgaa attccaggag atgtctgata 360
agaatctgga tggtgtgttc 380

<210> 8391
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-G8

<400> 8391

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cgctcttcgg cctctgttac ctgttcaaca tctacttcaa catctataac aagcaggtag 120
tcaaggtttt cccataccct ataaacatca cagaagttca atttgcgtgc ggaactgtag 180
cagctctgtt catgtggatc actggtatta ttaagaggcc aaagatttct ggagcacaac 240
ttgtagccat cctacctctg gctattgttc atactatggg caatctcttc accaacaatga 300
gccttgggaa agttgcagtg tcatttacgc acaccatcaa ggctatggag cctttctttt 360
ccgttactct ttctgcaaat ttccctgtgc aactaccta caatttgggt agtaccttcc 420
cttcttcca 429

<210> 8392
<211> 349
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-025-Q1-E1-H2

<400> 8392

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acacaggaag ttgagatcag aaaaatgcag gctgccgcta ctgccgccgg gttctcggcc 120
gtgctgcccg ccaagggcag gccggcggcg aggagcaggg tgggtggccc tgtccccgcc 180
acaaggagga gcgtccgtgt agctgccgtc gtcgcgaccg aggccgcgca gatcgactac 240
agctcaagcg tctcgggtgt cccgatggag gcctgcgacc tgcttgggtg cgacgcgtgc 300
aacgggcca tggtcccgga ggccaagccc gcctcggcgg cggcggcg 349

<210> 8393

<211> 62
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-025-Q1-E1-H5

 <400> 8393

 agccccacgcg tccgccccacg cgtccgcccc cgcgctccgcn cacgcgtccg cggacgcgtg 60

 gg 62

<210> 8394
 <211> 428
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-025-Q1-E1-H7

 <400> 8394

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 ctgttcatga ttcattatatt tgtttaatct ttacctcctt cctataagat ccacatcact 120
 aacatccata attctgagaa tggaactatc gctatcgtga tctgtaagt acatgggaag 180
 tagcatccaa gagtctaagt aaattctgaa tttttatcac ctgagctagc agcactgtga 240
 tctgtcagaa acattagggg taatacccag caatgggtgac cgagttatga attttacggg 300
 tctgagttag cagatgctgt aatctgatct agcaacatca ttgcacgcca aaaaagtttt 360
 tgtcgcatta aaaaaatttc tttgcacatc gtttaagggtg gccaaaggacc cacctggcaa 420
 ggatatca 428

<210> 8395
 <211> 416
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-025-Q1-E1-H9

 <400> 8395

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 ccgatgggca cgctcgctc ccaactgggc catccctccg tctctcaacc tcaaattggaa 120
 gatgttcccc tctgagggg attcaattgc ccgtcaaaag gttcggggcc aagcttcaaa 180

gtcccgattt tgggtgcagc aggtgggatt gggcagccac ttgcgctatt gatgaagatg 240
aaccctcttg tttcgggtgct ccattctatac gatgtcgtca acgcacctgg tgtcacagcc 300
gacatcagcc acatgaacac tgggtgctgtg gtacgtggct tcttggggcca gccacagttg 360
gaaaatgccc tggctggaat ggatcttgta ataattcctg ctgggtgtccc tcggaa 416

<210> 8396
<211> 331
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-A2

<400> 8396

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attaccgctg cttcttcggc ggcctccctt gggcaacgga cgaccactcc ctcaacaacg 120
ccttcagcac ctacggcgag gtcctcgagt caaagatcat cctcgatcgg gagacgcaga 180
ggtcccgcgg cttcggett ctcaccttct ccacggagga ggcgatgcgg aacgccatcg 240
agggcatgaa cggcaaggaa ctggacggcc gcaacatcac cgtcaacgag gccagttccc 300
gcggcgggcg tggaggcggc ggcggtgggt a 331

<210> 8397
<211> 157
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-A7

<400> 8397

aaaaggtttc acacttactt acccttaa at ggaagttcaa acccctccaa aagggtcacc 60
aaaattcaat tcaaggcct tctttttaaa acgtctaaac tggaaaaacc ctggctttac 120
ccaatttaaa ccctttgcag aaaatcccc tttccca 157

<210> 8398
<211> 375
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-B5

<400> 8398

gtccagaatt cccgggccga cccacgcgtc cagccaattc gcctatcaca aattaaacca 60
tatcacacaa agcagacgta aatgtccgcc gacccaaca atgcgcgcaa caccgacatc 120
tggatagcag gcgccttcgc ggccttcacg gtcgacttgc tggatatacc gctagacaca 180
gtcaaaacgc gcatgcaaag cctcgactac aagaaactat acacaaatgg cgccgacgca 240
aaagtcaacc ggtcgatgtt tcgcggcgta taccaaggaa ttggaagtgt aattctggcg 300
acattgcctt cttcaggagc attcttcacg acgtacgaag gagtgaaatc taccctgaaa 360
gaacacaatc ctaaa 375

<210> 8399

<211> 263

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-B6

<400> 8399

tttttgattc ataccctgtc caaccgacca aattgccaga tacacgatta caaagcgaat 60
gtaatatact ggttttgaca gctcgccgtg tccacaaagt gtgacgcaca aatactccca 120
ccacaaagat atacaatata agcatacaag cagcaatctg catgcctcac tcaacaccaa 180
cagcacacaa cccaggtagc acagcctgtg gcttccccct gcccatgggtg aaaccctgg 240
tgccatcagg catgcggggg cct 263

<210> 8400

<211> 419

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-026-Q1-E1-B7

<400> 8400

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gtgtgtacta gcagtctagc aaccagctag ctcgggcggc agcaggcagc catcatgtcg 120
gaggagaagc accaccactt cttcaaccac cacaagaagg acgaggagca gcccgccggc 180

gagtagcgggt actccgagac cgaggtgggtc accgccaccg gcgaaggcga gtacgagagg 240
tacaagaagg aggagaagga gcacaagcac aagcagcacc tcggcgaggc cggcgccatc 300
gccgccggcg ccttcgcact ctacgagaag cacgaggcga agaaggaccc cnagcacgcg 360
cacaggcaca agatcacgga ggaggtcgct gccgcggcgg ccgtcggcgc cggcggtta 419

<210> 8401

<211> 217

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-026-Q1-E1-C3

<400> 8401

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tcctatctag aacttaactt ggaagaggta naaccatgtc tatcangacc aaaacggcct 120
catgatcgag tgacattgaa gaatatgaag tctgattggc tttcttgctt ggacagcgat 180
gtangattca agggttttgc tgtcnccaaa gaatcac 217

<210> 8402

<211> 312

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-C5

<400> 8402

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ctcgactat aaatgtccta tctgatggac tggacatgga cgacgacatg gatgatcttg 120
attccgactc agatcttgat gttgacagca tcggtgagat tgtgtacgca atgtgagtaa 180
catctcaaca gccatctcag cagtcaacca aggaaccaat caagcatggg atgccctgtt 240
gtatactctg gcaataggca tgcacccctt tgtgaaaaac atccaagttc ttttcccaag 300
ggatcccaat gt 312

<210> 8403

<211> 200

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-C7

<400> 8403

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tcgagcaaag aggcagcgaa caccgcggc gacgcaagag ggagaagcga gcggtgcaccg 120
gtcctcctct cattcaaat ggccatggcg gcaccggccg gaaaaacccg aaggtccccc 180
ctggcttccg ggttcctaac 200

<210> 8404

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-C9

<400> 8404

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cacagtcatc agtggcggtta tcctcttcgt tctcgctcc ctggttggtg ttggctgggt 120
gttggcgagc tgggagtaga gaccgagaag tggagcggcc atgaagatcc agtgcgacgc 180
gtgcgagggc gcggctgcca cgggtggtgtg ctgcgcgac gaggccgcgc tgtgcgcgcg 240
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cgaggcgctc tccgccaagc tcccgcgctg cgacgtctgc caggagaaag cggcgttcat 360
cttctgcgtg gaggaccggg cgctcttctg ccaggactgc gacgagcca tccacgtccc 420
gggcacgctc tccgg 435

<210> 8405

<211> 242

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-D1

<400> 8405

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aaaattggaa aggggaaaaa tccagggata aggtccccca atccttcaat ccccccaacc 120
taccaaggac ggcattaacg gttgccaatg ggtaaagga ccttgctgga tttgtccttg 180

aaaagctagg acctaaaaat gcaatcttca ccaaagcagc cgatgccatg gtggaatgga 240
ac 242

<210> 8406
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-D10

<400> 8406

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aagtaaccaa acaatatgat cctgagatga agcaacactc gtttcttttt gaaattggtt 120
acccggaaat cgaagataat tgcaagccaa ggcaccgttt catgtcatca tatgaacaga 180
aagtccaaag ttgggataag ggttatcagt acctactttt tgctgcagag ccctatgaaa 240
ttattgcatt caagatacca agtacagaga ttgataaatc agcgaacaaa ttcttctctt 300
actgggatcc tgacaagaag gaatatctac tgcaactgta cttcaagcca agaccgccag 360
aagctaataa accaccacca gtcctccgg ggactttgcc taatgggact ggggttcctg 420
gtgctccaa 429

<210> 8407
<211> 239
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-D2

<400> 8407

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gtcaacgcaa gcgcacctgc tcccgtagag tgcttgcaat tgcaacaaat aaaaccaagc 120
ctgaattaat taagggtggg aatttaacct tgtaataacc gtccccccaa ccgtgttttg 180
tgaaactgtt gacggtctgt taacgttata cgtgcatgtt attttaaaga tttcaaaaa 239

<210> 8408
<211> 304
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-D3

<400> 8408

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gtggcttcgg tttcaaattt ggataaagga tttgtaatgg caaaccttga ccctaaaaaa 120
aaaaggaatt tggctaaaaa ttagggatta atgggattcc caaccttaaa ttttttccca 180
aaggaaacca aacctggtaa aaattataat ggtgaaagga acttggttga ctttgtcaag 240
ttcattacca agaaaattgg tacaaccggt gacacaaagg gtcaactaac ctcaaaggct 300
ggcc 304

<210> 8409

<211> 109

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-D5

<400> 8409

aagcccttcg ttttctcgca gtgccagtcc atccacgccc gctccgtctt cccctgccac 60
gacacccccg ccgcgcgcac caccttcccg ctctctctca acgtccccg 109

<210> 8410

<211> 90

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-D6

<400> 8410

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aaaaaaaaa aaaaaaaaaa aaaaaaaaaa 90

<210> 8411

<211> 123

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-D7

<400> 8411

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 cgg 123

<210> 8412
 <211> 365
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-D9

<400> 8412

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 gatgaacttt aggacatcct tggggaattg cacctggtgc agcagctaata cgtgtggctt 180
 taaaagcctg tgtacaagct cgtaacgaag ggcgcgatct tgctcgtgaa ggtaatgaaa 240
 ttatcatagc agcttgcaaa tggagtgtctg aactaccgc agcttggtgaa atatggaagg 300
 agatcaaatt tgatggtttc aaagcgatgg ataccatata caataaaagc aaagccgcaa 360
 cagtc 365

<210> 8413
 <211> 383
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-E10

<400> 8413

gaattcccgc ctcgaccac gcgtacgccc acgcggtccgg aagaagacga gtgtcaagtg 60
 aacctgaaac ttgcggtgtc actggtggt agcctgagtg tgagtgagtg atcgagctag 120
 ctgagctccg atcctcgcta gctaggatac cgccatacca caagtcttct tcacaagttt 180
 aggagtgaca gcaacaagag atcgatggcc tctgccaccg tgctcaagtc ctccctcctt 240
 cccaagaagt ccgaatgggg cgccaccagg caggccgccc cgcccaggcc gccaccgctc 300
 tccatggctg tccgcgcctc cgccacgccc gatgagctcg tgaagaccgc gaaaacgatac 360
 gcgtcgccgg ggcggggcat cct 383

<210> 8414
<211> 292
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-E5

<400> 8414

ggtacaggtc tagaattccc gggccgaccc acgcgtccac ccacgcgtcc gaggcagcac 60
cgccttctgt gctgagattg ttgagtcgcg agatgcctac ctctttgcag gccccatttt 120
caatgactac agctctgttg gctactcatt cctcctcaag aaggaaaagg ccatcatcgt 180
ccagcctgag cgtgtgatag tggggaatgg gccggcattc ggatgtgtga tgatgaaaga 240
gttcttgtct gaattggcta agaaggttta taagaacacc actgcctatg ag 292

<210> 8415
<211> 340
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-E7

<400> 8415

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tttagaaaga aaagctgtga tatttcataa ccctacagag acaaccagaa gataatagaa 120
aaaatcatat agcatgtatc tgtgaaaata aatagctttg tgacactgac acgcaccagt 180
gccaaagcca aacaacagag aacatcccaa gatgccaaact tgttctagca actactacat 240
tacatthttca acttttctaaa atggccactt gggtcaggcc accagaggct gatcaggcaa 300
acctgcccc aacgcccgtta tccttacgga agtccgtcat 340

<210> 8416
<211> 307
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-E8

<400> 8416

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cgtcgagcag cccctggtac ggggcccacc gcgtcctgta cctgggcccg ctgtccggcc 120
agcccccag ctacctgacc ggcgagttcc ccggcgacta cggctgggac accgcggggc 180
tgtccgccga cccggagact ttcgccaaga accgcgagct ggaggtgatc cactgccgct 240
gggccatgct gggcgcgctc ggggtgctgt tcccggagct gctcgccgc aacggcgtca 300
agttcgg 307

<210> 8417
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-E9

<400> 8417

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ggggtcaaca gcgcatacgt tctaggatac tctggatcaa tcatggccc tctaggctgg 120
atcggcggca catgcccct cctcctagct gccgccatat ccatgtacgc taatgctctt 180
cttgacggc ttcatgaagt cggtgcaaaa cgccatatca gatacagaga ccttgctgga 240
cacatatatg gaccgaaaat ttacgggctt acatgggctc tgcagtacat taaccttttc 300
atgatcaaca ctggctttat catcttagct ggacaagctc tcaaggccac gtatggactg 360
ttcagtgatg atggagttct gagactccct tactgcattg cgatatc 407

<210> 8418
<211> 313
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-F1

<400> 8418

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atacatactg gccacccgt gattccttca ccagcagtt cgtaaccacc tgctaaatca 120
tcaaaaagat gccccctgc aaagtagcag cagccttact cctgttgatc atcacaacaa 180
tttctgtcaa caccgtaact gggtcgcat gtaacgctca agagaagaac cagattgtga 240
gcttgtgcc aatgtacatc cagagaggaa cctcgttca gctcccatcc caaactgggc 300

catgctgtgc cgc

313

<210> 8419

<211> 453

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-F6

<400> 8419

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ccttccattc cagtactcgc ggaggaaagg aacaccagcc agcgccatgg tcacgtcgac 120
gaccgccgcc gccgtgctgt ccccgccgtc cgtggccggg cttcgcttgg cgccgtctcc 180
ccgggcgcgc gtggcggttc gcgcggcgcc ggcgcggcgg tccgtggcgg cgcgcgcgga 240
gctgagcccg tcgctgggtga tcagcctgag cacgggcgtg tcgctcttcc tgggccgctt 300
cgtcttcttc aacttccagc gggagaacgt ggcgaagcag gtgcccagac agaacggcaa 360
gacgcacttc gacgccggcg acgagcgcg caaggagtgc tcgggcctgc tcaagttcaa 420
cgaccccggt ggcttcaacc tcgtcgacgt cct 453

<210> 8420

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-F7

<400> 8420

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ccacttccac atcttccccg gcggcgggcg ggtcagttga accatggcgg actccaaggc 120
cacctcggcg gtcacctcc gcacccgcaa gttcatgacc aaccgcctcc tggcccgcaa 180
gcaattcgtg cttgaggtga tccaccccg gcgcgccaac gtctccaagg cggagttgaa 240
ggagaggctt gccaaaggcg acgaggtgaa ggacccaac accatctttg tcttcaagtt 300
ccgcaccac ttcggaggag gaaagtcac tggtttcggc ctcatctacg aaaaactcga 360
ggctgccaag aagttcgagc cgaaataccg cctcatc 397

<210> 8421
 <211> 380
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-G10

<400> 8421

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cacgtcgccg tcggcaccgg caccgtcacg cacaaggccg acatcaagaa gtttcaggcc  120
gccacgcgcc tccgcgccaa ggacaagatt gagggcggca agatcatccg cgtcgaggcg  180
caccatcc ccgagcacc caggcctaag aggggtgtccg ggcgggtgac gctgggtggc  240
gacgccgcgg ggtacgtgac caagtgtctc ggcgagggca tctacttcgc ggcgaagagc  300
gggcggatgt gcgccgaggc catcgtggcg ggctccgcca acgggacgcg gatgggtggag  360
gagagcgacc tgcgcaagta                                     380
  
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<210> 8422
 <211> 396
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-G12

<400> 8422

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gtcctcatcc gtccagggga gcaaacaagc aagcaagtaa acgggcgagg agctggatag  120
aggccggcga cgcaagcaa ccgccgatcg gagccgcggc tgaggaggag gagcaagctc  180
gagatggtgg gtctcgtcgg cggcagcacg gcgcggggcg agcacgtcgt ggccaacgcc  240
ggaggagaga cggagtacgt gcgccgcctg caccgccacg cgccggccga gcaccagtgt  300
acttcaccc tcgtcaagca catcaaggcg cccgtccacc tcgtgtggga gctgggtccg  360
agcttcgacc agccgcagcg gtacaagccg ttcgtc                                     396
  
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<210> 8423
 <211> 285
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-G6

<400> 8423

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gcttgagaag ctcaaggagc attattcaca cgagaaccac tggcatttgt tccagtagca 120

gtgcgcatat aatcatacag tatatTTTTT tactatgact gttgtcatga ttggggcttt 180

ctcgggagat ctgacattga tgaatgtaca aaattgggtg cctctagaaa ggtccactga 240

gactgaaaaa tcttcttgct gttttacgtc gatgctatTT ctggt 285

<210> 8424

<211> 67

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-G7

<400> 8424

acccacgcgt ccgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

accaaaaa 67

<210> 8425

<211> 72

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-H1

<400> 8425

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aagaattcaa tt 72

<210> 8426

<211> 156

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-026-Q1-E1-H10

<400> 8426

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aagaaaaatca aaaaagataa aaacttacat atacatgaca tcaaaaaataa taactcttca 120

aaaaagtaac ctcaaattca attcacgggg cgctcc

156

<210> 8427

<211> 369

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-A10

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ttctagaagc cgtatagaac tcatggtgaa ggcaaggagt cagtttaaag aaagaagcac 120

agcaacgaat gttgaaattg aagtgcctgt tccttcagat gccacaaacc caaatataag 180

aacttcaatg gggctctgctg catatgctcc tgagagagat gcaatggttt ggaaaataaa 240

atcattccct ggtggcaagg aatacatgtg cagagcagaa ttagtcttc ctagcataac 300

agcggaagaa ggggccccag aaaagaaggc gccgatacgg gtgaaatttg agataccata 360

tttcaccgt 369

<210> 8428

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-A12

<400> 8428

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gacctccgca tttccaaaca gcccagagcga gctagagcta gcagagcggc aggcacctcc 120

ctcctcaagg aacatggccc gcacgcagca gttggcagta gtggcgaccg ccgtggtggc 180

cttggtgctg ctggcggcgg cgacctcgga ggcggccatc agctgcgggc aggtggcgctc 240

ggccatcgcg cctgcatct cctacgcgcg cggccagggc tcggggccct ccgccggctg 300

ctgcagcggc gtcaggagcc tcaacaacgc cgcccgacc accgccgacc gccgcgccgc 360

ctgcaactgc ctcaagaacg ccgccgc 387

<210> 8429

<211> 376

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-A2

 <400> 8429

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 agcaaacaaa ccctgcaaca tgcaacaag ccctgacgct ttaaaacatc ggccggcact 120
 cgattcgcag caggtcaaag atggcggctg aagaagggga caaagcgaaa agccgctgag 180
 gcgggcagca aatgacgggtg gtgccggggc tggacgtggc gcggtacatg gggcgggtggt 240
 acgagatcgc gtcgttcccg tccttcttcc agccatggga ccggcgcgat acgctcgcca 300
 gctaccggct gctggaggac agcgccacgg tgcacgtgct caacgagacg tggagcaagg 360
 gcaagcgcca ctacat 376

<210> 8430
 <211> 351
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-A6

 <400> 8430

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 gtggaaatgc atttggattt ccgtagtgte agtccggctg ataggggtgc ttgggttctt 120
 catggcacga gcaaatgttc tgattcttgt attcgaatgt tttgaaatat tctgtctgac 180
 gggactgcgg agttggcgcg agaagtgtgc ttgttcagtt gttctatctg aaggcttagc 240
 tgtctgtagc tgtagctggt aacaacagtg gctaaaatgg tacctgaaat ctttgtgaca 300
 gtaacaagcc atttttcttt gaaaaaaaaa caatacgaaa aaaatagaat g 351

<210> 8431
 <211> 379
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-A7

 <400> 8431

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gagtcggggc cgggtggccgg aagtctggtg gtcggaagct cataaaaggc gtcaaaggcc 120
 cttacacagt gcctgatgag aaacggggaca atcacatccc atcaaccgcc ccatatagcc 180
 tcgcagagtg cgtccatgac ctctccacc ttgccgcaag gatggtagtc atgggtggca 240
 ggctcgtctt cttctaccct gtactgagag gtgaagatgg cactgccaac ccgcagttcc 300
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 gccgggttct gctgaccat 379

<210> 8432
 <211> 374
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-A9

<400> 8432
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 ggtgaggctg ccatcgttgc tcgcttgctg acgctcttca aggaaacacg tggtagatgg 180
 gcaagttcgt tgtgcccga ctcgccaagc tgggcaacca gatcaccatc gcatccacca 240
 tggtaggtct tgtggagtgc aagggtgtac cgtacaaggt cggctctggat gtgatcaagt 300
 tgctggagcg catgcagatt cgacaagagg ggtggtagct ttggaagttg agatgagctt 360
 gcgctgtgga gaac 374

<210> 8433
 <211> 390
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-B10

<400> 8433
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 ccgggcatct gaagctgctg ggcgcgtggc cgagcccctt cgtgaaccgt gtacgcatgg 180
 cgctgcacct caaggggctg gagtacgaga acgtggagga ggacctcacc aacaagagcg 240

acctgctcct cgcctccaac cccgtccaca agctcgttcc cgtcctcctc cacggcgaca 300
agcccatctc cgagtcactc gtcacgtgg agtacctcga cgacgccttc cccggcgctg 360
gccaggccgt cctccccgcc gacccctatg 390

<210> 8434
<211> 375
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-B12
<400> 8434

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cgaccacgcc ggcgcgcgcg ggcggcgcgg cgtggcccg cggaagtgc aagggcgga 120
aggcgaacga cttcgaggcc gcgttccggg agttcgacga ggactccgag gaggaggagg 180
aggacgacga gggggtggtg gagagcaagc ccgccttcgt cgtcgtcgcc tcgtccgcgg 240
cgacgcagcc cagggcgcg caggagcagc ggagccggcg cggggcgccc gaccagcagc 300
agtacagggg cgtccggcg cgcccggtgg gcaagtgggc cgccgagatc cgcgaccccg 360
tcaagggcgt ccgcg 375

<210> 8435
<211> 379
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-027-Q1-E1-B9
<400> 8435

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ggacggggaa agcaattcca gcagaccac acacgtcgcg ttttccatgc atagaaacga 180
gggaaagcgg tttcagcagc agtggggtgg agccatttta ctcatcctaa tccgtccacc 240
aacttggcta caaaaagtcg taccgaggcc cctcaagcga tagcgggtgg ggatctgctc 300
ggcgccggtg gcccgacgt ctccagctac tccgacttac ctacgtcctc caaggtacgc 360
acgtacgtac atctgattt 379

<210> 8436
 <211> 373
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-C11

<400> 8436

gggccgaccc acgcgtcagc ccaagcgtcc gatcataaca tcaacggcat cctggctggc 60
 catggttggt gttctggctg gtctcacctt tctgatgggt cctgttacga tgctaaagct 120
 ctacggagtc ccatactttg tatttggtgc ttggctggat atggttacat acttgcacca 180
 tcatggccac gaagacaagc ttccctggta cctgggacag gaatggagtt atctgcgtgg 240
 aggactgacg acgctcgacc gggactatgg actgattaac aatatccacc atgacatcgg 300
 aactcatgtc atccatcacc ttttccctca aatcccacat taccatctca ttgaggcgac 360
 cgaggcagca aaa 373

<210> 8437
 <211> 409
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-C12

<400> 8437

ggtccagaat atccggggccg acccacgcgt cagcggacgc gtgggtggca gagatgctct 60
 catatacaag taaaagcaac tttatttggt ccttggttgg gcggaaacca ggccgggact 120
 cgggagcatt ttgcattttc ttggcgtggt agcttttgat acggtgaagt cactgactcg 180
 tggagtgatg ttgctcaata atcagaacct tgtcctaata cagccgctga gacatcagct 240
 aaggcgaata agggaaggat gagtcatttg caccatgttt gaccaccaat tgtaggtgg 300
 tccatatatt ttgtactaat tgtgagactt tgtgctatgg atctcaactg tataccttgc 360
 tgggtgcatgg ctttgggttt acatgggtga aaatgagatt ggggtgccc 409

<210> 8438
 <211> 332
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-C2

<400> 8438

gccgaccac gcgtcaggca accgccgtcg ccccggtcca gggctctcaag tccgccgcca 60
gcctccccgt cgcccgccgc agcaccagga gcctcggcaa cgtcagcaac ggcggaagga 120
tccggtgcat gcaggtgtgg ccggcctacg gcaacaagaa gtctgagacg ctgtcgtacc 180
tgccgcccgt gtcgacggac gacctgctga agcaggtgga ctacctgctg cgcaacggct 240
ggataccctg cctcgagtgc agcaagctcg gggtcgtgta ccgcgagAAC tccacctccc 300
cgtgctacta cgacggccgc tactggacca tg 332

<210> 8439

<211> 375

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-C3

<400> 8439

gggccgagcc acgcgtcaga gagtataagc ttgacctcta caataacgct ggagtacatt 60
attgtatcag cagcatctcg ctctagacca tgatgacgac gagaaaagtg gccgcggcgg 120
gaggcgggga ggcggaggag atgaggcgga gaaacgccga gctcgagagg gcggcggcgg 180
aggcggcggc gagggaggaa cggctgcggc gggagctgga ggcggccctg gcgcggctgg 240
ccgtggccga ggaggccgag gagcgctgt gcgtgcagct cggcgagctg gaggccgagg 300
ccgtggagca ggccgtcgag taccaggagc gtgtcagggc gctgtccgag cgcctcgcct 360
tccttgacgg cgtgc 375

<210> 8440

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-C9

<400> 8440

ggtccggaat acccgggccg acccacgcgt cagcccacgc gtccggccac ggcttcctcc 60
tccgcctccg cctccgtctc gccgccgcgc cctcctcct cctcctcgtc gccggcggtg 120

ctccagttcg acgagcagca gcagcagcaa aatccgagggc cgcgtgcgcc ggccggcgctcc 180
 gggcccacgg aggaaccgcc caggccggcc cgggcgtcag ctccggctcc ggctccggcg 240
 tcgtcctcgt ccgtccgccg gtgccagacc tgccgcaagc ggggtggggct cacgggcttc 300
 cgctgccgct gcggagacct cttctgcggc gcgcaccgct actcggaccg ccacgactgc 360
 tgcttcgact aca 373

<210> 8441
 <211> 352
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-D1

<400> 8441

acgcgtcagg cgtcgcgtcg catcctacga ttcaaagctc tctctgctcg caggtcgcag 60
 ccatggcgaa gaactacccg accgtgagcg ccgagtacag cgaggctgtg gacaaggcca 120
 ggcgcaagct ccgagccctc atcgccgaga agagctgcgc cccgctcatg ctccgcctcg 180
 cgtggcactc cgcggggacg ttcgacgtgt cgtcgaggac cggcgggtcca ttcggcacga 240
 tgaagcatca gtcggaattg gctcacggcg ctaacgcggg gctggacatc gcggtgcggc 300
 tgctcgagcc catcaaggag gagttcccaa tctctcttta cgccgatttc ta 352

<210> 8442
 <211> 453
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-D10

<400> 8442

ggtccagaat taccgggccg acccacgcgt cagagagaag aacgaacctg agtttgctaa 60
 gaagcttgca tctgttgctg acctttatgt caatgatgct tttggcacgg cacacagagc 120
 tcatgcttca accgaaggag ttaccaagta tttgaagcct gctgttgctg gcttctcat 180
 gcagaaggaa cttgactacc ttgttgagc tggttgccaac ccaaagaagc catttgccgc 240
 cattgttggt ggatccaagg tctcaactaa gattggtgtc attgagtcgt tgctggcgaa 300
 ggtcgatatc ctcatccttg gtgggtggtat gatctacaca ttttacaagg cacagggata 360

ttctgttgga aaatctctcg tggaagagga taaactcgaa ctcgcaaaat ttcccatatt 420
gaaagggcaa gggcaaaggg ggtttctctt ttc 453

<210> 8443
<211> 395
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-D12

<400> 8443

ggtccagaat acccgggccg acccacgcgt cagcccacgc gtccggcgcc cgcgaactct 60
agaggacttg cgcacaagtg acggacaggt tgggcccacg tgctcgggtgtg cgcgtttccc 120
agctgagccg tggggaaaga gaggatgaga tgggccgaaa acatggaacc ttgcccgact 180
atgttccttt actttctctt tttctttttt tatgtttctt ttctttttcc aaattcaagg 240
attcaaaacta aatttcaatt cctgttttga acttcagatt tccaaatata gcacaatcct 300
attgtgaata taacttctac tatttgcatt aatattattt atttttcttc ctattattta 360
attatggaag ggataattga ctttataaga acttt 395

<210> 8444
<211> 387
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-D9

<400> 8444

gccagggccc ggtccagaat acccgggccg acccacgcgt cagggtctctt ctctctctcg 60
ctctctctcc ctagtctcca cgacgcaagg gagagtgcgc gaaagcgacg cggcgcgagc 120
gaggagggcc aaggcgaaga ggggaagcac cgcaccagga cccttggttcg ccgccgcgcg 180
ctctgatctc cgcgaggttg tcaggattca atatgtcgac cagcacattc gctacttctt 240
gcacgctgtt gggcaatgtt agaacaacgc aggcctccca gacagcgggtg aagagccctt 300
cgtctctaag cttcttcagc caagttacga aggttccaag cctgaagacc tocaagaaac 360
tgatgtctc cgccatggct gtataca 387

<210> 8445
 <211> 355
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-E10

 <400> 8445

 cggtctagaa taccggggcc gaccacgcg tcagcagagg aaaacaaagc tattgaggag 60
 ccagaagagg tgagtgccaa gctgccagat gaccatgtaa cttctgagaa gtcgtcagag 120
 gaagacaaag aaaacgcaga ggcacagta gacagtgtc ccctggggaa cccattggag 180
 gtcaatgagg agagctccaa tccttcagg gatactgtaa ctctgagaa gccactggag 240
 gaggataaga cgagcgcaga gccacagaa agcgatgat cctttgggaa aatattggag 300
 gccgatgaag tgagtgaac ccatcagagg atattgaac tcctgagaag ccact 355

<210> 8446
 <211> 364
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-E11

 <400> 8446

 ggtccagaat atccggggccg acccagcgt cagcccacgc gtccgcttct cctccccctc 60
 cgggttcgggt tcgggttcgt gaggttctcc ggggttcgggt ttcgtgggtg agcggatcga 120
 gatggcggcg tcggatgttg agtaacgctg cttcgtccgc cgcctcacct gagccacgga 180
 cgaccactcc ctccacaacg ccttcagcac ctacggcgag gtcctcgagt ccaagatcat 240
 cctcgatcgg gagacgcaga ggtcccggg cttcggcttc gtcaccttct ccacggagga 300
 cgcgatgctg aacgccatcg agggcatgaa cggcaaggag ctggacggcc gcaacatcac 360
 cgtc 364

<210> 8447
 <211> 413
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-E2

 <400> 8447

cggtcaggaa ttaccgggcc ggcccacgcg tcagggtccat gcgggctgcg gccctgcctt 60
 ttctcccatt cccctcacca cgtgacacgc gctctctccc gagtcccgac gaccgggcaa 120
 cagccgccgc cgccactcag cctccgtcgc cgtcggggccc ttgccgggcg gcgaacacca 180
 tcagggtgtac atgcgtacgc ccatgccctt ggctgcgccc gccctgcaa gtggtttcct 240
 gctgggtctgt gtggatttgg ctgccggaag attgattgat gcggccttca ggatcactgt 300
 agactcgctg tgagattcca aggctgctca ggtcatgttg ggggaccagt gcatcataca 360
 ggcgttagac tcggtttagct catcaagctc tgcccctgat tcgaaccccc ccg 413

<210> 8448

<211> 71

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-E3

<400> 8448

caaagggtcc aagcttaact tagcctgcaa gggaagtcac acccctccaa aggggtcacc 60
 aaaatcaaat t 71

<210> 8449

<211> 386

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-E9

<400> 8449

ggtccagaat acccgggccg acccacgcgt cagggaccac ctccacggcc acggcaagac 60
 ggccaagggtg atgcacctgc tgctctgggg acccaagtga agcggcgaga ggccaccgta 120
 ccgccggggt ctcccgtggt cgttgctcgt tttgctctgc ctgcaatccg ccccgcacgg 180
 actgtactgt acctatatat acacctacat actacgacgt gcacctgtac tacgacgtgc 240
 tgctgtacca tactaaatac tagtgcgctg ctgctccctt gccttcttgc ttgcaccagc 300
 cactccgctt ttttgctcga acgatcgact gctcgtgtcg cgtcggggcca cggccggtcg 360
 tcagtttggg tgtgtccact ccaactg 386

<210> 8450
 <211> 362
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-F10

 <400> 8450

 gggccgaccc acgcgtcagc ccacgcgtcc gcccacgcgt ccgcccacgc gtccgggctg 60
 ccgcctgcag ggcaagtact tcttccacga gcagatttca aggcacgcga ccatcatgaa 120
 tatctttgac aaaacccctc atgtgcataa agacgcattt gttgctcaa gtgcacccct 180
 tattgggtgat gttcaagtcg ggtcaggagc ttccatttgg tatgggtgcg tcttaagagg 240
 ggatgcaaac atcatacaaa ttggatctgg gaccaatata caagacaatt ctcttataca 300
 tgtggctaaa tctaattctaa gtgggaaggt ctttccaaca accattggta ataacgtcac 360
 ag 362

<210> 8451
 <211> 389
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-F11

 <400> 8451

 gggccgaccc acgcgtcagg accaactagc aacatagaaa gcacaatagt gtaccaacaa 60
 tggcagccaa aatattttgc ttccttatgc tccttgggtct ttctgcaagt gctgctaccg 120
 cgaccatttt cccgcaatgc tcacaagctc ctataacttc ccttcttccc ccatacctct 180
 caccagcagt gtcttcagtg tgtgaaaacc caattcttca accctacagg atccaacagg 240
 caatcgcagc aggcacctta cctttatcac ccttggttct ccaacaaccg tcagccctat 300
 tacaacagtt acctttggtg catttggttg cacaaaacat tagggcacia caactacaac 360
 aacttggtgt aggaaacctt gctgcatac 389

<210> 8452
 <211> 414
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-F12

<400> 8452

aacctgccag gccggtctag aattaccggg tcgagccacg cgtcagtgca agaaaaaatc 60
tacatgttga tggcgtggat cagaaaaatg gtaagttttg cttcatagat gtattaatat 120
ttggaatctc aataaaccct tcttgttttc cgtctgctaa catattcgta tggaaccag 180
cacaaaactc aacgagaata atgatgcaat gatacataca tgtccacagt ccatacgttt 240
tttttgaaga aataacactt ttctagatga gataattagc acatgtgcaa ttagccaatt 300
actgtcttgt gttatgtgag ccattggatt tgatttttat atcctagaaa gtgattcatg 360
ttacacttga cctgagattc atggaaccaa ttggttgagc tgcacattca aatt 414

<210> 8453

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-F9

<400> 8453

ggtcaggaat acccgggccg acccacgct caggacacct tgcccatatt caggactta 60
tagggcatgg atatgggaag cttccttact gtccttgagc tctagattcc ctgcatatgt 120
aagggtggtcc ttgtgccgtc aagatggtgt aacttcctct cccagtcctc tagccttgat 180
ctgtactaga gccaaacacg ccagccctct cctgtggtgac cattgtccac atcactgtgg 240
ctagagctcc caacagaagg agtgtaaatt taagatgaag tggttgtgga agaggagttt 300
gtccttttgc ctattcatca agtggatgga gctatctaac tggttattgg gtagaaaggt 360
cttgagcctc ttcactgcaa ca 382

<210> 8454

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-G11

<400> 8454

ggtcaggaat atccgggccg acccacgct cagccacgc gtccgcggac gcgtggggga 60
aaacaagtca aatgcaactc ctatcaatta cagcgagaag gatattacag taatattcag 120

aaggaggggt ggttgtgatc ttgttcaaag ttttagtgat tggaaaggaa ctgttgccctc 180
 agcaccagat gtcataggca tgacctttct ttcaattgtc tctcttggtg acgatgtacc 240
 aggaaagaag caccttgctc gtgcagttga gctatacttg acctacaaac ctccaattga 300
 agaattacag tattttcttag attttcaagt ccactagtt tgggctccag ctccaccagg 360
 tattgctagt caccatagga aggaacctgt ctgccc 396

<210> 8455
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-G12

<400> 8455

cggtcaggaa ttaacgggtc gagccacgcg tcagcccggg aagaacttcg tgggtgctggt 60
 cggcaggctc ctctctgctg agctcttctt ccgctacgac acattcaccg ccgaggctcg 120
 caaggagctg ctccggcacca gcgtcatctt caccggtgtc acgaaagcta cctccgggtcc 180
 gggcagcgag taaaccgccc ggccggcgcg cgtcgttga tatatgatga gtggacgtga 240
 cagagtgtcc cattattttct taatttcgtc attttcctcc ttctttctaa taagacttct 300
 ctctcaccct cggccccacc ttcacgtgtg attggagggtg tttgtcgctt ttgtaataat 360
 tataatgcag gatggcatgt tgcacaaatt gtcccccaaa aaaaaatctc tactttttca 420
 aaggaaaaac cccctc 436

<210> 8456
 <211> 406
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-G2

<400> 8456

ggggccgacc cacgcgtcag cccaagcgtc cgccacgcg tccggacgac ttgtttcatt 60
 gattcttgaa gagatcgagc ttcttttgca ccacaaggctc gaggatgtct tgcaactgcg 120
 gatcaagctg cggctgcggc tcaagctgca agtgcggcaa gaagtaccct gacctggagg 180
 agacgagcac cgccgcgcag gccaccgtcg tcctcggcgt ggccccggag aagaaggccg 240

cgcccagagtt cgtcgaggcc gcggcggagt ccggcgaggc cgcccacggc tgcagctgcg 300
 gtggcaactg caagtgcgac ccctgcaact gctgatcaca tcgatcgacg accatggata 360
 tgattattat ctatctagct tgtggtggtg gttgaacaat aataag 406

<210> 8457
 <211> 330
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-027-Q1-E1-G7
 <400> 8457

aattcccggg ccgaccacg cgtcagcgcc gccatcatgc gggagggccc caacctcttg 60
 aagctggcgc gcaaggagca gtgcctggcg ctcggcacca ggttgcgctc caagtacaag 120
 atcacctacc agttctaccg cgtcttcccc aacggcgagg tgcagtacct ccacccaag 180
 gacggcgtct acccgagaaa ggtcaacccc ggcagggagg gcgtcggcca gaacttcgcg 240
 agcatcggca agaactcaa ccccatcgac gtcaagttca ccggcaaggc caccttcgac 300
 taatcacact tcacgtacgc cgcacgcccc 330

<210> 8458
 <211> 403
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-027-Q1-E1-G9
 <400> 8458

ggtccagaat acccgggccg acccacgcgt cagggcgccg actaacaacc tcgccgacgg 60
 cgggtaccac atgtataaag acatgctgga gtggatcggc cggccggcga agaactttcc 120
 ccagcagccg acacagccgc tgcgggtgtc catctccaag aagctacggg cgtacgtgga 180
 ggacaagtat agccgcgccg gcgtggagaa gggcaagtac gtcgtcatcc acggcatcgc 240
 ctctgactcc gtcgccaaca tgaagtccag aggcgacgac gactgccttc ttccccctcg 300
 gactgggct cagatagcca aggaaatcag ctccggcgac aggggggtca agcctctgtt 360
 cgtgatccct catgagaagc acagagatga aatccaggaa gaa 403

<210> 8459
 <211> 435
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-H10

 <400> 8459

 gacccacgcg tcagacttgt ttcattgatt cttgaagaga tcgagcttct ttgaccac 60
 aaggctcgagg atgtcttgca actgcggatc aagctgcggc tgcggctcaa gctgcaagtg 120
 cggcaagaag taccctgacc tggaggagac gagcaccgcc gcgcaggcca ccgtcgtcct 180
 cggcgtggcc ccggagaaga aggccgcgcc cgagttcgtc gaggccgcgg cggagtccgg 240
 cgaggccgcc cacggctgca gctgcggtgg caactgcaag tgcgaccctt gcaactgctg 300
 atcacatcga tcgacgacca tggatatgat tattatctat ctagcttgtg gtggtggttg 360
 aacaataata agcgaggccc aactcggggg ccatacatag gtattgtgtg gtgtgtgtga 420
 gagagagaga aacag 435

<210> 8460
 <211> 394
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-027-Q1-E1-H11

 <400> 8460

 ggtccagaat acccggggccg acccacgcgt cagccttgac attctcaaag agcagtggag 60
 ccctgctctg acaatttcta aggtcctgct ctccatctgc tccctgctga ccgaccccaa 120
 cccggacgac cctcttgtcc cggagattgc ccacatgtac aagacggacc ggccgaagta 180
 cgagtcgacg gcccgcagct ggacgcagaa gtacgcgatg ggctgacgaa cgctttcctg 240
 ctgctccacc cgactggcgt ctcaagaaag ccgttcctgg gcgccattgt tcccttgat 300
 ttgttggttg tcgtgtgtat ccctgatcca tctaggatca tcgtattgta ttgtattgta 360
 gtgtatgtcg tcggcttacc atcgttgcca tcca 394

<210> 8461
 <211> 380
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-H12

<400> 8461

gggtcgacgc acgcgtccgc ccacgcgtcc ggcattcaaa aacacaccaa gcgaagcgca 60
ctagcaacga cctaacacca atggctacca agatattagc cctccttgcg cttcttgccc 120
ttttagttag cgcaacaaat gcgttcatta ttccacagtgc ctacttgct cctagtgcc 180
gtattccaca gttcctccca ccagttactt caatgggctt cgaacatcca gccgtgcaag 240
cctacaggct acaactagcg cttgcggcga gcgccttaca acaaccaatt gcccaattgc 300
aacaacaatc cttggcacat ctaaccctac aaaccattgc aacgcaacaa caacaacaac 360
agtttctgcc atcactgagc 380

<210> 8462

<211> 417

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-027-Q1-E1-H2

<400> 8462

ttcccgctc gaccacgca taagaaacca aacgatacag gaatacgata cgccgctcgc 60
ctgaatcgag accaccaccg ctcccgccct gcctcacctc gccgactaga gtttttgccg 120
ccgcggatct cgccgtcccc gccatggacg cgtcgcacac gggctcctcc gcagccgccg 180
gcgacgcccc gaccaccggg gagcaccgga tggggaccac cattgtcggg gtctgctacg 240
atggtggcgt cgctctcggc gctgattcca ggaccagcac tggaatgtat gtagccaacc 300
gtgcttcaga caagattacc caattgacag acaatgtgta cgtttgctgc tctggatctg 360
ctgctgatac acaagtcatt tcggactatg tacgttnatt cctccaacaa cacacaa 417

<210> 8463

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-H7

<400> 8463

cccacgcgtc cgacgagaga gagcagacca ttaaccagct cttgacggag atggatggct 60
 tcgctggcaa cagcgggtgtc attgtgcttg ccgccaccaa caggcccgat gtgctggact 120
 ccgcgctcct acgaccaggg agatttgata ggcaggtcac cgttgacagg ccagatgttg 180
 ccggacgcgt caagattctt gaggtccact cccgaggaaa ggctttggcg aaagatgttg 240
 attttgataa aattgctaga aggacccttg gtttcaactg tgctgacctc caaacctca 300
 tgaatgaggc tgccatcctt gctgctcgcc gtgatcttaa ggaaattagc aaggatgaga 360
 tctctgatgc tcttgagaga atcattgctg ggccctgaga agaaaaatgc 410

<210> 8464

<211> 373

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-027-Q1-E1-H9

<400> 8464

gggccgaccc acgcgtcagc ccacgcgtcc gagtatctct ctctcccgcg cgcgcgggtg 60
 agccggggac cctcctacgt ctgccaccc tgctgggtata gcccgccggt cgtccacgcc 120
 atggccaccc aatatgcgcg gctctccctg ccatgccgcc tgccctcgcc gctccctccg 180
 ccggtgccga cgacgacccg ccggctgccc cgcgcgcggy cggcgggcggc gtccacctcc 240
 ccgcggtgcc cagcgcgcgg gggcgcgggc gccacgcgcg cccgcggccc gtgccggcct 300
 cggcctccg agggcgaagt gcagcagcag gacgcggaag cggaccaagt ggtggacagc 360
 aacatgctgc cct 373

<210> 8465

<211> 452

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-A10

<400> 8465

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 tgttgatat ctgctaactc gcaaaagaaa ctcaggtgcc cacacacagt gctagggttg 120
 ctattcttca cagttctaatt ttttagcatt taaccaaagc gcgtttgtct atccttaaaa 180

ggagtgtggt ttccaatgct tgaacttttg tagtaagggt gtgctacatc aaatccagcg 240
 tgttttaggat actgctacat acatgaagggt gagctttagg attgtttcct aaagcctcct 300
 agaatctgtc attaggaatt tttagagatg ctgacatact tagatttttc tccctttttg 360
 gggaaaatct tggttaaata agtaattggt gctgtgtag taaactaaaa tgggctgttt 420
 taacacactc aaaaaaaaaa cgggggaaag aa 452

<210> 8466
 <211> 281
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-028-Q1-E1-A6
 <400> 8466

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 tgttgaggag agagatcgat tattattatt gctgctactg catatgttta gtgggtgtat 120
 aggttgggaa cacacattca tggaggatgg aaccacacac cgatcaattg gagggagaaa 180
 gagattgttc gggtaattaa ttgtaataata tatagagaga gacaattgac ccacatacat 240
 atataagcta ttagtgcaat gcttgctgtt ggggtcaaaaa c 281

<210> 8467
 <211> 451
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-028-Q1-E1-A7
 <400> 8467

ggtcgacgca cgcgtccgcg aggtggcaca caacgtgtgg gccgacacct tctacgccat 60
 ggcgaggagaac aacgtcatgt tcgagggcat cctgggtgaag ccgtccatgg tgacgcccgg 120
 cgcgaggaggc aaggacaggg ccaccccgga gcaggtggcc gcgtacaccc tcaagctcct 180
 ccaccgccgg atccccccct ccgtgcccg gatcatgttc ctctccggcg ggcagtcgga 240
 ggtggatgcg acgcagaacc tcaacgccat gaaccagggg cccaaccgt ggcacgtgtc 300
 cttctcctac gcgcggggcg tgcagaacac ctgcctcaag acctggggcg gccacccgga 360
 caaggtcaag gcggcgagc acgcgtgct gctgcgcgcc aaggccaact ccctggcgcg 420

agctcggcaa gtacacctcc gacggcgagg c

451

<210> 8468

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-B11

<400> 8468

ggtcgacgca cgcgtccgag gattaagccg aaagatcaaa atgacgcac c aattgtcaca 60

aaaactaatt tcaagcatct gtattggacg ctgacacagc agctagcaca ccacaccatc 120

aacggatgca acatgaggcc gggggatata tttgcgactg gcacactgag tggacctgaa 180

cgggactccc tcgggtgtct gctggagctg acatggaacg ggcagaagga gataccggtg 240

gggaatttga cccgcaagtt cctagaagat ggagatgaag tcattctgac aggatgttgc 300

aagggtgaag gctacaacat tggttttgga acctgcaccg ggaaggttct gccggcactt 360

ccctgagcca acacgtcttg gcatcagttc tccggagtct caacgatctc agctatcaga 420

gagttgtctc aacggtctca actatcaaa 449

<210> 8469

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-B12

<400> 8469

ccggtcaaaa attagcgggt cgacgcacgc gtccgaccac gagtccgcgg acgcgtgggc 60

cgccagcctc cccgtcgccc gccgtcctc cagaagcctc ggcaacgtca gcaacggcgg 120

aaggatccgg tgcattgcagg tgtggccggc ctacggcaac aagaagttcg agacgctgtc 180

gtacctgccg ccgctgtcga cggacgacct gctgaagcag gtggactacc tgctgcgcaa 240

cggctggata ccctgcctcg agttcagcaa ggctcggcttc gtgtaccgcg agaactccac 300

ctccccgtgc tactacgacg gccgtactg gaccatgtgg aagctgcca tgttcggctg 360

caacgacgcc acccaagtgt acaaggagct gcaggaggcc atcaaatacct acccggacgc 420

cttc 424

<210> 8470
 <211> 447
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-B2

 <400> 8470

 acgcgtccga ccacacgtcc gccacgcgt ccgcccacgc gtccgcccac gcgtccgccc 60
 acgcgtccgc atcatgtttg atgtaacttc aaggcttact tacaagaatg ttcctacgtg 120
 gcatagggac ctgtgcaggg tctgtgaaaa catccccatt gtccctctgcg gtaataaggt 180
 tgatgtgaag aacaggcagg tcaaagccaa gcaggttact ttccacagga agaagaatct 240
 gcagtactat gaaatttctg ccaagagcaa ctacaacttt gagaaacctt tcctgtacct 300
 tgcaaggaag ctggctgggtg attcgaacct tcactttggt gaagctgttg ctcttaagcc 360
 tccggaagtt accatcgaca tggctatgca gcagcagcat gaagctgagc ttgctgcagc 420
 agctgcaaaa cctcttctctg atgacga 447

<210> 8471
 <211> 140
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-B4

 <400> 8471

 caaacctccg ccggcccctt ggaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaggcgg 60
 gcgacccaaa aggattaaac ttagctaccc gtgcaatgga actcaaaagg ctctctaga 120
 gcggcaccca aaattcaatt 140

<210> 8472
 <211> 460
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-B7

 <400> 8472

 cgggtcgacc cagcagctcc acgccgtcgg gcgcctggaa gggcaccagc ggaggccacg 60

ccgtgctcat cagcggatac agcgagggca aaggcaactt cgccatggtc agggacatga 120
 tacatacata catactgctg atcgagctct gctgccttgc atctatctat atacctaaca 180
 tgcatatgct gctgcttgga cgacgcgcgg cgtgcagatg cccgacgccc acgcgtcggt 240
 cgtcggggcc atgacgcaca gcttcgtccg gacgctggag tgccagccgc gcgggggtcac 300
 ctacggccac ctgctcagct ccatgagggc catcatgaag aaccgcggcg ggggctgcga 360
 tctgcacggg gccatcggcg caccatccg caccgtcgcc aacttcagcg gcgtgcacgt 420
 atccatgtcg aatctcctcg tctctgtcaa catcaacatc 460

<210> 8473
 <211> 450
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-C1

<400> 8473

cgcgctccacg gacacgtggg cggacgcgtg ggcggacgcg tgggtgagag gatgactcgg 60
 gtgcaggagg ctactctgcc aataattctt caaggaaagg atgttcttgc aaaagcgaag 120
 acaggaacag ggaaaacagt tgcctttttg ggagcttgca aaccaattgg ctgctgaggc 180
 caggaagctt ctcaagtatc atcgctcact ggggtgtgcag gttgtaatag gtggcacacg 240
 gttacctcaa gagcaacgga gcatgcaagc taacccatgt cagattcttg ttgctactcc 300
 tggaaggcta aaggatcatc ttgagaacac gcctggattc tccacccgaa ttagagggtg 360
 caaggttctt gttctaaatg aggctgaccg cctgttggtat atgggattta gaagagacat 420
 tgagaaaata attactttca tccctaaaga 450

<210> 8474
 <211> 331
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-028-Q1-E1-C10

<400> 8474

ggtcgacgca cgcgctccgac cagcagtcgg cccacgcgtc cgcncacgcg tccgcncacg 60
 cgctccgcna cgcgctccgca agcgacggcg cttgcacaag atgaaccagc tctctctcct 120

ccaccaccta catcggtgt ctcccggacg cggccatggc ctcaccgccg cctcnccac 180
 cgtcgtccga gctgggtctt cctcctgtga accaccaacc ccgcagcagc acgcaaaacg 240
 cctccttgcc atagegcctc acgaaagcat cgcagcagct agggaggagg aaagccactt 300
 gcgtcaaaaa ctcgctgcag cgggcaataa t 331

<210> 8475

<211> 453

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-C11

<400> 8475

ggtgccggtc aagaattagc gggtcgacgc acgcgtccga ggtggagtcc tcggacacca 60
 tcgacaatgt caaggccaag atccaggaca aggagggcat tccaccggac cagcagcggc 120
 tcatctttgc tggcaagcag ctggaggatg gccgtaccct tgcagattac aacatccaga 180
 aggagagcac cctccacttg gtgctgcgtc tcaggggtgg catgcagatc ttcgtgaaga 240
 ctcttactgg caagacgatc acccttgagg tggagtccctc agacaccatt gacaacgtca 300
 aggccaagat ccaggacaag gagggcattc caccggacca gcagcggctg atcttcgccg 360
 gcaagcagct ggaggatggt cgcaccttgg ctgactacaa catccagaag gagagcacc 420
 tccacttggg gctccgcctc aagggtggca tgc 453

<210> 8476

<211> 447

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-C12

<400> 8476

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 aggagaacat caagaacgcc gcctcctcca ccggcaacat cacgttgagc gtcaccaaga 120
 gcaaccggga gaccggcgag gtcatcgggc tcttcgagag cgtgcagccg tccgacaccg 180
 acctcggggc caaggcgccc aaggatgtca agatccaggg ggtctggtac gctcagctcg 240
 agtgattcga gtgtctaact gctaggtgtc cgaccgtcct catggatctt gggaaggtgt 300

acgtaccatg gaaaactttg gagagcagag gaggaatcgt gtacgtaatg tacttggttaa 360
 tgcaaattcg ggctgtcgct tttttatattt cagtttgagg ttcttctctt tcttggtgtc 420
 tcaagaacta catccccctgt gcaaaac 447

<210> 8477
 <211> 450
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-028-Q1-E1-C3
 <400> 8477

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 gctaagaatc aggcactaag ggaagctggt gcagttgtgc ctacatcata tgaagctcta 120
 gagagtgcaa ttaaggaggt atttgacaaa ctggttgagg aaggaaaaat ttctcctgtg 180
 actgaaatta cacctcctcc cattccccgag gaccttaaaa ctgcaattaa gagtgggaag 240
 gtccgagctc ctaccacat catttccacc atctccgatg acagaggtga tgaaccgtgc 300
 tatgctggtg tgcttatgtc tacaattatt gaacaggggtt atggagttgg tgatgttatc 360
 tctcttttgt ggttcaagcg cagccttcct cgctattgca ctacagtttat tgagatatgc 420
 atcatgcttt gtgcggacca tggtcctctg 450

<210> 8478
 <211> 477
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-028-Q1-E1-C6
 <400> 8478

aggtaccagt ctagaattcn cgggtcgacc cacgcatcca cccacgcgtc cggccacaga 60
 aaacatatct tgctgtagcg gcatggctgc acgcaactgc tggaaaaaaa tatatgacat 120
 cttgtgttat gctgctacgg tgcttctgca gcagcatgaa gttttttttt ttcttggttaa 180
 aataggtttt ggtgcactca tgaattcatg aagtgtgate gttttctatt gccgttgcca 240
 cccttgtttc ccaggcgaga tccatcttca gcttaggggt ctacagcttg gtggcagtc 300

cgtcggtggt tgcggtgatg aacgtatttt ggttctggaa gataactcaag gggatggtga 360
aaaccctttc taggaggaag cacagcgaag atgggagaac agattagaag gaatgaagga 420
aggatgctac tgaactgtac acatgttcat ctcaacgcac ttacggcact cgcattc 477

<210> 8479

<211> 407

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-028-Q1-E1-C9

<400> 8479

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gcgttcagcg cgagctgagc cagccagtgg gtcggtcgct ggagggcgag ccataaaggc 120
gtcagcgacg gcagcatgat gagcggcaga tcgggcggga gggacgccga nggcgagtgg 180
gaggttcggc ccggcgggat gctggtgcag cgcaaggacg gtgaggcggc cggccccgtc 240
atcaggatca gggctctcca cggcgccaac ttccgcgagg tcgtcgtgcc ggcgcaagct 300
accttcggtg agttgaagag gacacctgtt cagactactg gcttgagacc tgagaggcan 360
aggctcttct tccgtgggaa ggagaagagt gacagagagt tcttgca 407

<210> 8480

<211> 375

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-D10

<400> 8480

ccggtcaaga attagcgggt cgacgcacgc gtccgattgc aatgattcat acaccaagac 60
tttgaagaaa tttcatggat ggcttgccag ttctagtttt acggtggcaa tgaagcttgc 120
tctaataaga gagaaattta tggaggatcat tagtggaacc ggtgacatca atgcagatat 180
tgagaaattt tgcacgacct tctctccttt cctcaaagaa aaccacaact ttctggcgag 240
cgtcggtctt gatgatctga aggcttcata gattaatctc catgctgatt acaacaaaat 300
aagcatgtct tacgaaactc aaagtgttgc cgaggggtata cctgtttccc gtagccatct 360
cccccttgaa aaact 375

<210> 8481
 <211> 154
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-D12

 <400> 8481

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 gaagcatcac aaagctgtga tcaccgagtt cctctcaact ctcaaggact agagtccaac 120
 gggatctcga ccaaattggtt ttacactaac tcgg 154

<210> 8482
 <211> 464
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-D2

 <400> 8482

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 tttgattaca attaactaaa aattcagcac caatccctca atggggacat ggcatgttgg 120
 ttcaacagtc aggagacttg attcccaggc agatgcaggg ttcacttcac tgcttcggct 180
 ggagttgtca gttctacagc ttcaacatgg tttgtcaggt ctgccatggg gacgcaatga 240
 tcgtcaactg ctcggcaccc tttgctatgc tttgtttgtg gagctgctga gtggtggtgt 300
 ttggagaagt cttgacctg aatatatagc tgaatcaaag agtaaggaat cttgtcgagt 360
 gggattattg gcaagggaca aggtcatgag gacatggatg cagtatgtgc atacatttga 420
 tttgagagcc ctttctctgc ttggattgag cacatcctat gcag 464

<210> 8483
 <211> 439
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-D3

 <400> 8483

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ggagcagttc ctccgctgg cgattgaagc cgccaagagc gccggcgaga ttattcgcaa 120
 gggattctac cagaccaaga acgtcgagca caagggccag gtggatttgg tgacggagac 180
 ggacaaggcc tgcgaggacc tcattctcaa ccacctccgg aagcacttcc cggaccacaa 240
 gttcatcggg gaggaggagt ccgcggcgct cggggccacc gctgacctca ccgacgacct 300
 cacctggatc gtcgattccc tcgacgggac cactaatttc gtccatgggt tcccatttgt 360
 atgtgtctcc gttggcctca ccattgggaa aattcccact gtcggagtcg tcttcaacct 420
 catcatgaac gagcttttc 439

<210> 8484
 <211> 301
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-028-Q1-E1-D6
 <400> 8484

aattcccggg tcgaccacg catccacgga caggctgggg acggtagcat cgacgtggag 60
 gtgtgcctcg cgccagacac catggcgcat ctctcctcgc acaaggagtt cttgcagtac 120
 gtgtcctccc ctgcaccgtg aggcggtgac agagtgaatg tgtggcttgt tgctgcgcag 180
 ctacatatat taacgggatt tgtacccttt caccatttgg aaagcacttg atatcggcaa 240
 ttttaaccccc ttgtacacaa attgtcctac aactaactct aggatatata ggtgcatttg 300
 g 301

<210> 8485
 <211> 270
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-028-Q1-E1-D9
 <400> 8485

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 gtcagattga ggacttgacg gatgaagcaa gccctaattt tacagaagaa gttgtttccc 120
 tgttcttcaa gaactcaacc aggctaata gcaaatattga gcaagctatg gacaggaatc 180
 ccagagattt cagtaaatgg gatgtaaaca tgcagcattt aaaaggaacc ggttcaacaa 240

ccggtgcttg caggatgaaa aacgattgca 270

<210> 8486
<211> 252
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-E1

<400> 8486

gcgtccgaca caactcggca gccacaagaa accaccccct tccggcacac gggctcgacc 60
acctgactcc atcacctgac ctgtctgtgt tctagggaca agaatagcac agatatacat 120
gagcgatcag aggtggggag aagaggatga gcaccataac ggcgtcttcg ctgaacccca 180
tcgcgccgct cttcatcact gcggcgtacc tgcagggtggg agacttcacg cccgactggg 240
gggatctctt ca 252

<210> 8487
<211> 416
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-028-Q1-E1-E10

<400> 8487

ggtcaagaat taacgggtcg acgcacgcgt ccgaacccca acttcttctg agcggccggc 60
tgcgggcatg ttcttgagcc tgctgtatt ctactccgtg tgtgttgagc catatatctg 120
atgctcaagg attgggtaat ttgaacaagt ggtgcaactg cgcgtgtaca tggatttgct 180
cttcctctat gtctctgtcc tctgtctccg gttactttcc ctgtttcact atgcatgca 240
catagacatt gccatgttct gctgccagct cagggttgt gaataacana aataaaaaaa 300
acaaaaaaaa aaaaaaacia aaaaaaaaaa aaaaaaaaaa aaaaaanaaa aaaaaaaaag 360
aaaaaataaa aaaaaaaaaa aaaaaaaaat caaaaaaaaaa gggggggccc cccaaa 416

<210> 8488
<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-E11

<400> 8488

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tgatggtgaa tccgtcaaag gccttgatgg gttcaacatc agaaaagatt acctctgcca 120
ggtaccaaac tttgagtttt aaatgataaa gctgagaccg ggtgggtgac ttgcacgaga 180
agggagtctc ggtgtagtgt ctccgtttga gtcgattaag gaccatgtcg atgtaggctt 240
gatgattgag gaccttttaa ctggtcacat gcctcatcat ggataagctt tgcctcgggc 300
agactaatac cagaaagggc aacacacaat gggagtggag agatggcgag agtagcgtgt 360
accctccatg gtaagaggct ggacggtggg gtatctgtgc tctcggttgg cgtgaacccg 420
gtc 423

<210> 8489

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-E12

<400> 8489

ggtcaagaat tcacgggtcg acgcacgcgt ccgcggaacgc gtgggaactg gttgagaaaa 60
ataactggtt acccgagggg cctattacca ttggtgttac ttcagggtgc tcaactccag 120
ataaggttgt tgaggatgct cttcagaagg tatttgagat caagcgtcag gaaattttgc 180
aggttgcata aattttaagc agagatttgg tgaagagctg aatagttttg gcttggcaaa 240
ggttactaga aacgttgcac aggcaaagt ttgtacagta gctaaggatg taacgagttg 300
ggcacgaata ctaccacgag tcaactatcct tgtgctggaa ttacagtac ggtgaaacta 360
aaatggtgtt atcattggtc cgaataacat ttgcatcagc ctttctaact tctaagggtca 420
actttttgcc acttgatg 438

<210> 8490

<211> 283

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-E2

<400> 8490

cacgcgtccg agcaagctgg gagtgggtgg ccagcgccaa cattaaaagg atggaaggac 60

cttccgatgg agctcctggg gcggataata tccacagttg gaaatgatag gatgggtcatc 120

gtggcttcgg gggtttgaaa aggtggcctt aacccccctg aatggggggtc aataaacctt 180

caattaaaag gtgcaaaactg agcatgaata atttaatgat aactcctgcc cacaagttca 240

ccaagttgca agttctcaat ctccggcaaa acaaacctca act 283

<210> 8491

<211> 427

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-028-Q1-E1-E3

<400> 8491

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agcggagcag atcgagtggg gcaagatcca gacccctacg gatgaggtgg tgggtgcccta 120

cgataccgtc gcgtcgcttc ccgaagatct cgaggagacg aagaagctgc tggataagct 180

cgttgtgtc aagcttaacg gagggctcgg gacgaccatg ggctgcactg ggcccaagtc 240

tgtcattgaa gtccgcaatg gggtcacatt ccttgacctt attgtgattc aaattgagtc 300

cctgaacaag aagtatggat gcaatgtcnc tttacttctg atgaactctt tcaacaccca 360

tgatgacaca cagaagattg ttgagaagta ttccaactcc aacatcgaaa ttcatacttt 420

caatcag 427

<210> 8492

<211> 457

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-E9

<400> 8492

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gcgctcggca gcatgtgtc catgcacggc cgctgatgag ggagccagcg gtgggttatta 120

gtagtgcaga caagagctcg ggcgcccgcc cggccatggg atgggatggg gaggcgttgc 180

agcagcaatt tatgtgctac ctacgtacta gtatttatta taattgttat tactaacaac 240
 aacgactggg agtatcgatc agagaccgac gctattcgat cgttgggttcg ttccattgtc 300
 cttccttgct agctgggtgt gtatcgacca tctaaatcta acaggacacg tggacctgga 360
 cggcaagaga tgtccagtc agcagtgtgg aacgtttgtt gctttgtcta tcattaattg 420
 ctataagttt gtttcatata tacatatata ctactgt 457

<210> 8493
 <211> 363
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-028-Q1-E1-F10
 <400> 8493

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 tactcatggg caaggatcaa attcccagac tcaggggggtg gatcttagtg tgaacaacca 120
 tgactctcca ggggtgggtc caacaagtaa ttccgaaaga gacgccatca agtaaacatt 180
 ggaagattgg aatgtacatt tcaactacat attctgttct ataggagctc ctgggggcag 240
 aaatgggggtt attcagtggt ctctctgtta tcactagtaa gcgtatttct ggagagattg 300
 gagctaataa ctgcatctca attcggcttg tcgtgcccta gacggtattg ctgtccaatt 360
 gca 363

<210> 8494
 <211> 407
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-028-Q1-E1-F11
 <400> 8494

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 gtaaagggtc ctttcagcca ttcaagaaac cttggggcga tgagcacgag cccttgaaaa 120
 cttgtatga tgctgttcag tccatcaaac ctacagttct gatcgggaca tctggagttg 180
 gaagaacatt caaaaagaa atcattgagg ccattgtctt cttcaacgag aggcctatca 240

tcttttccact gtcaaaccce accctgcatt ctgaatgcac tgctgaacaa gcatatacct 300
ggagtcaggg ccgttcaatc tttgccagtgc gcagtcattc tgccccctgc gaggacgaag 360
gaaagacttt tgtgcctgng cagtcgaaca atgcctacat tttccct 407

<210> 8495

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-F12

<400> 8495

ggctgaccga cgcgtccgag gacgagtggt cggacgcgtg ggaagagcct ggaccaacaa 60
ctcttgcttt agggattgat ttgacctcgt tgggggtgaa tttgaactcc caagataatc 120
tttacaagac atttggtctc ccgtgggtcaa ggcagccagc tgtaggagaa cctgattatc 180
agatcccagc ttgtttctct gcagagccac caccagcgtc gcaaccattt cattttcaga 240
agtttcaccc tttgacacta ttctacatct tttacagcat gcctaaagat gccgctcagt 300
tatatgctgc taatgaacta tacaataaag ggtgggtttt acacaaagac taccgtgtct 360
ggctaacaag agctcctaatt tccgcacctc ttgtgaaaac tccac 405

<210> 8496

<211> 434

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-028-Q1-E1-F7

<400> 8496

gaccacgca tccacagaag taccgcacag cccgctataa accagacctg tcagaaggta 60
catcggaaaa aaggacagcc actgaagagc tggctctgga cctgaaaacg agcatggatc 120
ttactgaagc gctgcgcctt cagatggaag tccagaaaac gcttcatgaa cagcttgaga 180
ttcagagaaa attgcagttg cggattgaag agcaaggaaa gtatctgcag atgatgtttg 240
aaaagcagag tcaatcgagc acggagaaaag tccaggatcc atcctcaagg gatacaacag 300
ctaaaccgtc atctaatacag agccagtcta caaacaagga tantgggtgca accatggacc 360
caaatggaac aggagacatc gcacggacgg cagaactggg aaaacgttcg tctgaactag 420

gtgtaaaaca gaaa

434

<210> 8497

<211> 329

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-F8

<400> 8497

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ctccggcgcc ggatcgagcg tcgtcgttcc tcgaaacttc aggctattag aggagctcga 120
gcgtggagag aagggcattg gtgatgggac agtgagctat ggaatggatg atgctgatga 180
catctacatg cggtcatgga ctggtaccat cattggccct cacaatactg tacatgaggg 240
tcgcatctac cagctgaagt tgttttgtga caaggactat ccggagaagc cacatctgtc 300
agattccact caagaaatca acatgacat 329

<210> 8498

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-F9

<400> 8498

cgcacgcgtc cgagttcaac cgtagcccag aaccctggcc tgctgcctcc ttccacagct 60
gcaaccgtta ctgacagcac caagatcgca gcagtgccag ccgcaccaat tgctgtggcc 120
aacgcccaga agagtgcagc agatataccg caggctccca aggcattctt tcgcagggttc 180
cttgagaaga gaaaggatcg cttactgcg aaagcacgt acccgggttc cccttcagat 240
gttacacctg tgaagaagga gatgtcggat ggtcagccat ggcttgggct gggacctcag 300
atcgccaatc ctgatctgag cttgtccaag gaggcgagcc agtgatcgat gatccagcat 360
caccatcttc aaaactgcga tactcaacag ccatg 395

<210> 8499

<211> 424

<212> DNA

<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-028-Q1-E1-G1

<400> 8499

cggggtcgagc cacgcgtccg atcgcacact gggagtggag agatggcggg agtagcatgt 60
accctcctgg catagtagca cgcctggtag ggtaatgtgc tctcgggtgg cgcgacactg 120
ttcatgtagt ggaggactcc gtgggaacgg ttgacatatg caagggttaa gtgctacata 180
tgtcgtgtgg ttagagatcc cagctgggta taatcggttc gaatcgtcgt tgctcctcgg 240
ttatggagac tcatccctgt gaccatcatc gtagttagca agtgaaatat gagaatgaat 300
aaaatggagc tagtataggc caagtgcctg aactagatca ggcanatata gattcaggta 360
ataacctaac tagtgaaata aaatttggct taaggatcaa ctggtancaa gcttttctgc 420
aaaa 424

<210> 8500
<211> 433
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-G10

<400> 8500

gtcgacgacg cgtccgacga tttataagaa taacattcta gatctagaag aaagtatagg 60
ttcataattg ataataata atcgatgaaa gtaaaaaaaaa caacatctat gaaatatata 120
taaataaaac gaaataaaat atgcataatt aataatataa cataaattaa aattattaat 180
aaaatatata aaaaagcata aaaagcccg taataggtaa aaaataaaaa agaaaatcac 240
atggatatta ttttgataat ctaaaatata tcatggaata tctcatgggt actttataaa 300
cactcaaagc taatcgtgaa acatcatata catactatgt gagtcgtgag tcctcttaaa 360
gtataacgta aaacatcaaa cacacatgtt aaacatcaaa cacacatata taagccgacg 420
ttatttgtca cct 433

<210> 8501
<211> 216
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-G11

<400> 8501

ccgggtcgac ccacacgtcc aaaacagtac aacctgtgca tattgttgat gttccccggtc 60
atgctatgct caagcccaag cttgctgaac tctgcctaa agctgctggg gttgtcctta 120
atgttggagc tcaagatttc ttgtccaaca tgcaagctgc cggaaaatac cctttataca 180
ttctcacaaa agcatctgtc actaacataa ggatcc 216

<210> 8502

<211> 377

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-G12

<400> 8502

attcacgggt cgacgcacgc gtccgaccac gcgtccgcgg aggaggtggg ggtggtggat 60
atggggggatc atcaggatac ggtggtgcct atggtggcgg tggcagcggc ggcggcggct 120
atggtggtgg tcagagtacg agttcttggg actgaactga actctgatta gaagtgaaaa 180
atggggccaac cttttgggcg tgaaaaatgg gtcaaccgtt atcgattagt cctgtttgga 240
tggagcgaat gcttgaaatt tgttgcttga catacgatta atcttgcgtt gtgttgtgct 300
aagggtattgg cttatgttat tatctggatt ggtgtttttt ctacgcctca agcttgtgct 360
gtcccccttc acaaaaa 377

<210> 8503

<211> 414

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-028-Q1-E1-G2

<400> 8503

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agggtaacaa atgtggcccc cagttttacc ctgaagcacc ggaaactgag tgatgcttgt 120
ggccattgta cgccacctga tgcttgtccg atccttcaga ctgaagccca cacttgacat 180
agtgatgctt gctacacttt tgttgtcgat atgcttcttc tgccaacaac ataagcaatt 240

ctttcttctc cgattatctg cggacccgat ttctatgcgc tcgaaccatt gaactgagtg 300
 gggactgtgg agccattttg tgatgaacag ttctaataatc cagtataaaa gtacgttgta 360
 acatatgcc a gattaccata gcgatcgaaa tctcctanga gatgacagtt ttg 414

<210> 8504
 <211> 447
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-028-Q1-E1-G6

 <400> 8504

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 caacatcagt gaaagtttagc agggcccttc acaaattgac atctgggtcca gaaaaagaaa 120
 ccaagtatgt tatattagga gaaaaggga aagttcagct gttgcgtgac tcaaaggaca 180
 gcattgaaat gactgcaact gaactgcaga agaaccctat caactacaca caggttgccg 240
 tgctcgcgga tgacatattg aaaaatgtgg aatatgatgc tctgagggtt attttcaaca 300
 agttccaatc tgtcatatcg tttaagccca caatggtaac aatactttcc cccgagggtg 360
 cagaaaaaga atcagaagct ggtgggaaga tgggtgacct agaactttat gagattgaag 420
 gcggcgagac anaatcagag attttgc 447

<210> 8505
 <211> 420
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-G8

 <400> 8505

cgggtcgacc cagcagctcc gccacgcgt ccgcttcggg cccaactcca ccaccttcat 60
 cgtgccggcg gagatcttcc cagcaaggct gcgggtccacc tgccacggta tttcttcagc 120
 tgcaggaaag tgtggcgcca ttgtcgggtc atttgggttc ctgtacgcgg cgcagagcac 180
 ggatcccacc aagacggact ccgggtaccc gccgggcac ggagtgcgca actcgctggt 240
 catgctcacc ggatgcaatg ttatcgggtt cctgttcacg ttcttggtgc cggagtccea 300

gggaaaatcg ctggaagagc tctccggcga gaacgacgag gaggcagcac cgcagcaaca 360
gcagaccgtg ccgacagatt tgagtgaata aaacagagaa acagtacact cctactacta 420

<210> 8506
<211> 342
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-028-Q1-E1-H11

<400> 8506

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cactgctcca gccctttcta ccgcccactc caccctcttc ccttaacccc tcacacagt 120
atagacttac tgttacaagg gatatagtca aagacgctct acagagactt gttcagagcg 180
acgagttcgt tgatctgggtg tgccgggaat tgcagagatc acttgtatac gctgcttgct 240
tagtcctgtc gggagttttc tggctcgtgg caagaatgtg cctgtaattt tcctttgact 300
tttttgcatt cttcncttcc cgtactattg tataggtttg tg 342

<210> 8507
<211> 406
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-028-Q1-E1-H3

<400> 8507

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gactacagca tcatgggagg attagtgatt gaattcgggc agaagggtgct tgatatctca 120
atcaggaaca gggcgaagca aatggaggcg ttcttgaggc aaccacttga cttctaacag 180
ccttttggat aaaagaagca tcatcggaat gcagaggctg tcctgttgaa ggttttctctg 240
tgtctgcaat tttaatctgg ccttttgaat aaaatgtttc ctctaacaag tgaagggcac 300
tgtttttatt gtctcgtggg ccacagatgc ctgctgaaca atttatgttc atttcttctt 360
ttcttaaaga agcatgcact aagaacatga aggatgcatg ccatgg 406

<210> 8508
<211> 359

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-H8

 <400> 8508

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 agggcgggcg gctcaggctg cagttcgcca acgctgccgc agcagccgca ggtggtgtgg 120
 gtgtcgtcga caaggcgggtg caggaggtg acgacgatgg cgacccccgt ggcaagaacg 180
 catgcatata cgacgacgac cacgatgacg agcgctaggt gatcgtcggg gttcgttgat 240
 gtacttttga tactttaaca acattcaata atggccctaa aaaaagggt tcccgcaatg 300
 cggccaccgg ctaaaaaaaaa aaaaaggggg ggcccccaa agggttcaag cttaatttc 359

<210> 8509
 <211> 199
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-028-Q1-E1-H9

 <400> 8509

 tgttatTTTT tatgttcttt ttattgtttt tatttttttt tttatttggt attttttttt 60
 ttgaaaagg tatatcccaa tccatccatg tgtaaagccc atggattact attttccacg 120
 gggccgatta gcggtcggtt gaatattgcc aacggtggct gtcctgtca tcaagagtgt 180
 ttaaaaggag gatttttct 199

<210> 8510
 <211> 352
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-A1

 <400> 8510

 agttatatat atgagttgta tgcagtcacc gaactggtac aggcttccgc tttccatttc 60
 ctgttgggag tcgtgtagt taatcctggg gtgtgtattt gtttcatcaa tcatgccagc 120
 cgatttgaat ctggtttcac cagcatgac tgatttgggt atacaagtat aaaccgcaac 180
 gagcgatctt gtaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaacaaaaa 240

aaaaaaaaa aataaaaaaa aaagaaagaa acaagaacaa aggaaaaaaa aaaaaaaaag 300
 ggggggcgcc ccaaaagggtt ccaagcttac ttacgcgtga atgcaacttc aa 352

<210> 8511
 <211> 443
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-A11
 <400> 8511

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 tagcaatggg aagatcgtcc acatcaatcg ggtaactggg gaagcacaag cacgtagtga 120
 aggtgtagcg gaagtaatct tcaaagggtc aaattttaag ctgcaaacia ctatcactgt 180
 tctcaagggtg aaccagatag ttgttgatgc tcttgccggag aactgacta atgcagctgg 240
 cctgccggat ggatacatgt tttctgtgag atttagtgat tcaattgagc acagtattgg 300
 atcctctgcg agcccaatta atgtcccctt tgaatgcaag gttgaccctt cttttgttgg 360
 gtttgttgag ccatggactg agcatgccac aaagaaatcc tactgcctgt ttcattcata 420
 ttcacctgca caactgttgc ccg 443

<210> 8512
 <211> 454
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-A2
 <400> 8512

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 tattaacatg ggcacctact gctacaaaaa actgtatagt tcttttccac cacgctattc 120
 acgtttcttg ctattaagtg cttacagaaa atactgtggg tttcttacct ccatacatgg 180
 taagggtcatg ttaactctaa atacctaaat tttttaattt atacatttcg aattaatctt 240
 tgttgttatt tataatacgg aatttagtta gaatagaaat ttcttaatga agtacatcta 300
 gcacgaattt gtttctacat ttctactaaa gcaggaaatg gcactactct acttcgcagc 360
 ctaagacctc aagatatgtt ggcaaccatc aaagtacatg tttcaagaaa atgagaattc 420

tagggaaata cagacaccaa acccatatta caca

454

<210> 8513

<211> 435

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-029-Q1-E1-A6

<400> 8513

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gggcagctct tcaaccctat aggcctccaac aagcaatcgc agcaagcaac atacctttat 120

cacccttggt tcaacaatcg ccagccctat ctttggtgca gtcattggta caaaccatca 180

gggcacagca gctgcagcaa ctctgtctac ctgtgatcaa ccaagtagct ctggcaaacc 240

tttctcccta ctctcagcaa caacaatttc ttccattcaa ccaactgtct acattgaacc 300

gtgctgctta ttgacagcaa caactattac cattcagcca gctagctact gcctactctc 360

agcaacaaca acttcttcca tttaaccaat tggccgcact gaaccccgct gcttatttgc 420

agcagcanat actac 435

<210> 8514

<211> 458

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-B10

<400> 8514

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ccgcaccaag ggccgaactc aaccaaccat cggccccatt tgaagcccca tgaatgaagg 120

aaatgaagga aaaaaagaaa gaaacgcagt tgtttctcag agtagttgaa tgtctggagg 180

gaggctgcaa tatagctgtc tgctaactaa gggcttcggt ctccaagaga aataggcaga 240

cgctgtctaa tcaatcatgg gcatgtacat atgtgcatca ttttatacag aaattttata 300

tgtatctaata caatgctggt ttgcggtcat ctggctcttt ttggcgcac acttgctcac 360

cttatcccaa tttagggctg atttggttaac aatagaatta gatgggatac atgagaggaa 420

atccattact atttaaaatt aaataacaag ggatttttc

458

<210> 8515

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-B11

<400> 8515

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gtctattgtc ccttccagaa acctggctgc cagaaggag ccgaggggag gaccatctac 180
tgcaaagccc acggtggcgg caggcgggtc cagtacctgg gatgcacgaa gagcgccgaa 240
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tcgcgcgccg cgcgcgggag gtccggcctg tgcacaaagc acggcggcgg caagcgggtgc 360
cagagggaga gctgcaggag gagcgcggag gggcactcgg gcctctgcat ctcgcacggc 420
ggcgggaagc ggtgcca 437

<210> 8516

<211> 397

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-B2

<400> 8516

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taattattgg atcaatttcg ataattatta gtagatctat gagatatgcc gcctggaaga 180
ggcgaggtaa gctgcagcat gtaaaaaaga gaaaaaagat gtgacaacct aaaagaagga 240
ggctttgcca tgatgggtgc gctcgcattg caggccaggc aataataaaa agatgattat 300
tgcgtgcccg gggaggagat cgcacggggg ttgatgtttt tggccccggg ttctcctccc 360
tcattctgtt ccgtgttcct gtatgcgttg ctccgc 397

<210> 8517

<211> 420
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-029-Q1-E1-B4

 <400> 8517

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gccaggccca atgctctagg gctgcctgcg ttgagggcga ggagcgagag ggtgcggtgc   180
agctacgcca aggatgccaa gaacgcggcc ccagtcagca ccaagggcgc aggcgcgtcg   240
ctgctcgccg cagcggggcg ggtgaccgcg tcggcggggc ccgcgctggc gctcgtggac   300
gagcgcacgt ccacggaggg caccgggctg agcctcgggc tcagcaacaa cctgctgggg   360
tggatcctcc tgnnggtctt cggcctcatc tgggccctct acaacatcta cacctctgac   420
  
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<210> 8518
 <211> 430
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-B5

 <400> 8518

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tcttttgtgc caggagctta gattgctgat aattgtcagt agcttttcta gtattaatta   180
ctgaaagaat tgtaaagtt gcttgacaaa gcactttatt ctgagtttgg taaacaactt   240
atcttctagg cactacacgt tatgacttat tagaatcgga tttaaaagag aattctcact   300
attactaatt ggttggtgta tttgagataa ggcggttgtc agacattgat ctatttgata   360
gggttctagg ggctgtgtgc aaatactcaa cggcttaacc tagttttaag aggaaatctt   420
gaaagtgtag                                     430
  
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<210> 8519
 <211> 398
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-B7

<400> 8519

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catcgttcca cttacatcgt ttgttcgttc gttcttcgcg gtgatctgct tgggagttgg 120
gggcaatgga ggcctacgtc ctgttcgcgc gcgccaagga gcaggaggag gacatcggct 180
gcccgctcga gtcgtccgcg gcgcgttcca cgtcctcgtc gtcggacggg gtggacctcg 240
ccgacgacgc cagctcgtcc gggccacct gccacttcga gatggcctcc ctcatgacgc 300
acctcccgat caagaggggc ctgtccaagt tcttcgccgg caagtcgcag tcgttcgcgt 360
cgctggcggc cgtgggcggc atcgatgacc tgcccaag 398

<210> 8520

<211> 288

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-B8

<400> 8520

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atcgtttgtt cgttcgttct tccgcgtgat ctgcttgga gttgggggca atggaggcct 120
acgtcctgtt cgcgcgcgcc aaggagcagg aggaggacat cggctgccc tccgagtcgt 180
ccgcggcgcg ttccacgtcc tcgtcgtcgg acgggggtgga cctcgccgac gacgccagct 240
cgtccggggg cacctgccac ttcgagatgg cctccctcat gaatcacc 288

<210> 8521

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-C11

<400> 8521

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tagtgttgga gagaagagaa tacactacac tacgcatggc aaaccagcac cagggccagg 120
gcatggcggc attggccctg gtgctgctgg tgctggcggc ggcggcggcc aaaacggctt 180

cggcggtttc ttgcaacccc gggcacctgg cggtttcccc cccggcatta atggccggcc 240
 cagacccttc cgcttcttgc ggctccaacc tcaaggccca acaggggtgc ttctgccatt 300
 tcgtgaaaaa cccacctac gggcgctaca tcaacagccc caacgcgcgc aaggtcgtcg 360
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 a 421

<210> 8522
 <211> 478
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-029-Q1-E1-C12

<400> 8522
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 ggaggatcgt cgaggctgac cagttcatga gggctggcct ctatgacgga tggctccac 180
 acctgttcgt tggcaacctg ctcaagggcc aaactgttgg agtcattgga gctggctgca 240
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 acctgtatca ggccacacgt cttgagaatt tcgtcacagc atatgggcag ttcctcaaag 360
 caaacggtga ggagcctgtc acctgnaaga gggccgccac catggaggat gtcctcaggg 420
 aagctgacgt gataagtctg catccggtgc tggacaagac acctaccatc tgataaac 478

<210> 8523
 <211> 357
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-029-Q1-E1-C4

<400> 8523
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 cacgtggag cacggcatgc acccgccggt ctctccaaac cccgagtggc gcaagctcat 180

ggacgagatg gccgtcgtgg gcacggagga gtaccgctcg gtcgtcgtca aggagccgcg 240
 ctctcgtcag tacttcagat cggctacacc gggagaacga ttcccggaag gatgaacatc 300
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<210> 8524

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-C7

<400> 8524

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 gctccgatcc ggtgcgacta ctaaccacg ccgcagaagc cgcgcgtcct gatcgcgcgg 180
 gggtcgagga gaggggaagc gcggcgccgc ggttgccctgc caccgcaccg ccgcaggaga 240
 aggaagagga gcccgtatcc ctccgccccg ctgcccgcgg gaccgatgga ctccgagcac 300
 tggatctcgc gcctggccgc cgcaagcgc ttctacgcgg cgcagctcgg ccacagcgat 360
 cgggccggga tggatgagct ggagatggac gaggaggtca ggcccagagt cccctgcccc 420
 tac 423

<210> 8525

<211> 341

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-C8

<400> 8525

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 caccgcgcgg gctcgagccg ccggaccaag ccgtgccgcg tgcgcgccgt cgcgtcgcgc 180
 gcgcgcaccc cccgcgcccc gtcgtccacc ggctcgggtga agaccgcgat gacgatgacg 240
 gagaagatcc tggcgagggc gtcggagcgc gcggcgctgg agcccgggga gaacgtgtgg 300
 gtggacatcg acgtgctcat gacgcacgac gtctgcgggc c 341

<210> 8526
 <211> 457
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-C9

<400> 8526

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tgcaaaagca ctgaatctca gggtaaggaa gaaggacaat ggtgttgtca agattcaggg 120
gaggaagggtg gggaggaagg gtgtcctgga gttcgacact gaaatatttg agatcacggc 180
atcctaccac ctcatcgaga tgaaacaaac gggcgggtgat tcacttgagt acaagaaact 240
gttgaagag gacatccggc cagcactgaa ggacatagtc tgggcctggc atggagatga 300
ccagcaaaa aagtagtagc tttggatctc tcttttttgt tccataaaat tgtagatct 360
ttcacttcag attgattttg ttcgacatgt gcggtgttctt cttactagtt acattctttc 420
tgtttctgtg gaccattgga ctgtattctg tcgtgca 457

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<210> 8527
 <211> 402
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-D2

<400> 8527

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ggctagctgg aaaggtcggg agccatgggg aggggccggg tggagctgaa gcggatcgag 180
aacaagatca accgccaggt caccttcgcc aagcgccgca acggcctgct caagaaggcg 240
tacgagctct ccgtgctctg cgacgccgaa gtcgcgctca tcgtcttctc caaccgcggc 300
aagctatacg agttctgtaa cggaccgagc atcacgagaa cacttgagag gtaaaaaaaaa 360
aacagttatg caggcccaga tactgctgta cagaacaaag ag 402

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<210> 8528
 <211> 439

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-D5

 <400> 8528

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 ccgggggaccc tcctacgtct cgccaccctg ctggtatagc ccgccggtcg tccacgccat 180
 ggccacccaa tatgcgcggc tctccctgcc atgcgcctg ccctcgccgc tccctccgcc 240
 ggtgccgacg acgacccgcc ggctgccgcg cgcgcggcg gcggcggcgt ccacctcccc 300
 gcggtgcca cgcgtcgggg gcgcggcggc cagcgcgcc cgcggcccgt gccggcctcg 360
 cgcctccgag ggcgaagtgc atcagcaaga ggcggaagcg gaacaggttg tggacagcaa 420
 catgctgccc tactgcagc 439

<210> 8529
 <211> 421
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-D7

 <400> 8529

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 aagcagcgcg ctttggaagt actgaacttg tacgcattct gctgaaggtc gcataatcaga 120
 atagcttggc tgtggacacc gatctggctc tgggtgatgc ctacattac tgcaagttca 180
 aaacaatgga atgcctagtt gatgaaggga acgtgagttc tttccttggc cctctgataa 240
 aagctgcaga gcgtgggtgc ttgcaggttg tccactgggt cgtcagtcga ggctctctcg 300
 acattgagat gtgccttgcc ctgacgactg ctgcctccag cggccatttc gtagtggcgt 360
 cgtacatgct tgcacatatc cctcagcaaa tccttgaagc tctcagcaca cagattctca 420
 a 421

<210> 8530
 <211> 415
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-D9

<400> 8530

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aaaagaaaag ggcggaagca ctatagggtc taagtttacg tacacgcgaa gggcggcctc 120
ccaacacgtc tgaaacctaa attcaacttc caggcaatgt ccttcctctt ccatcgtggc 180
gactgagttc actcttccgg ccgtcgtttt aaacgctttg aaccggaaaa cccttgcggt 240
agccgacgtt atcccccttg cgccaaatcc cctttccctc acctgcagtt acgcagcctg 300
ggcccgcacc ggtacccctc ccgaacattt gcacaaccg aatggggagt ggaacctacc 360
ctgaacctga ccattacacg tgccagatcc cgagctcccg cccatttcgc ccgct 415

<210> 8531

<211> 445

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-029-Q1-E1-E10

<400> 8531

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agcaagatgg cggagattga gataaaaaca gcacctgctg acttccgctt ccctacaaca 120
aaccaaacaa ggcattgttt tactcgctat gtcgagtacc acagggtgtt gaatgccaaa 180
ggggatgatg ctggtgtttg cgaaaaattt gccaaagtact acaggtcctt ttgccctgga 240
gaatgggttg agaaatggaa cgagcagagg gagcatggga cgtttccagg acctctctga 300
atgtaccgcc cgagacctcc agttggacca gtcaacaagt tggccaggca gtctactgt 360
tccattctgc attcctactt ccagaatcgt aatgccttt tgtcncttgc tcttcaacca 420
agtcacacaa aactgttagt gatgc 445

<210> 8532

<211> 208

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-E2

<400> 8532

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acatcaatgc tgatacggcg gctggcgaga ttgccgctgc cgtgggcgcc gagaagctgc 180

tgttgctcac agatgtgtct ggcatttt 208

<210> 8533

<211> 376

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-029-Q1-E1-E6

<400> 8533

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tggggtacct agtcgctct gctagcctac catggctgat caccaccggg gcgcgacggg 120

aggtggcggg ggctacggcg acctccagcg cgggggcggc atgcacggcg aggcgcagca 180

gcagcagaag cagggcgcca tgatgacggc gctcaaggcc gcgacggcgg cgaccttcgg 240

cgggtcgatg ctggtgctgt ccgggctgat cctggccggc accgtgatcg cgctcacggg 300

ggccaccccc gtgctggtga tcttcagccc ggtgctggtt ccggccgcca tncgctggc 360

gccccatggcg gccggg 376

<210> 8534

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-E8

<400> 8534

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gagaggatca tgaaggcgca ggccctgagg gactctagca tgtcggggta catgtcgagc 180

aaaaagacta tggaaatcaa cccggagaac ccaatcatgg atgagctccg taagcgcgcc 240

gaggctgaca ggaatgacaa gtcagtcaag gatcttgatg tggtgctggt cgagacagct 300

ctcctgacct ccggcttcag cctggatgac cccaacacct ttggcaccgc gattcatcgc 360
atgctcaagc tcggctctgag catcgatgag gacgagtctg ctgaggccga agctgagatg 420
cctccgctgg aagatgacgc cggc 444

<210> 8535
<211> 455
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-029-Q1-E1-E9
<400> 8535

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ggcggaggga cgagtggagg aggcacccta tggcggggaa ccagctgcgc caccacacac 180
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cgggtcaagaa gctggagcca actttaccaa gcactgggtgc tgttgatggt tttacagttt 360
tgagctcata aggtcagcca tgaccatatt gtaatctgtg accaggtaga cttgccact 420
ggtcctcca actattgtct tggggacctg tgtta 455

<210> 8536
<211> 449
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-029-Q1-E1-F8
<400> 8536

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gcgctgcgca cagacacacc aagcgtcggc accaatggct tactaccagg aggtggacta 120
ctgctcggag gaggtgaggt cgggtggccc ggccggcttc ggccgccacg gcggcggcgt 180
ccagcagcac gtcgtcaagg agaagttcga ggaggtcgac acggtctcac gcgcggcg 240
caaccaccac caccaccatg gtcaccacgg cggccacggc ttcgtgggtgc gcgagaccag 300
ggtcgaagag gacatcaaca cctgcaccgg cgaggtccac gagcgcaggg agagcttctt 360

cgccagggct aactgagccg cccggcggcc ggcattccacg cccgttcgtg cttgcctgcg 420
 tgccttatgt atgtctgtgg ttgactggg 449

<210> 8537
 <211> 422
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-F9
 <400> 8537

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 aatgccacct ccgacgactt catgtccgcc gtctccttca ggacccacgc ggtcggcacg 180
 agcggcgggt cgcggcgggc gccgacggag gcgaagctga aggtggccat caacgggttc 240
 ggccgcatcg ggcgcaactt cctgcgggtgc tggcacgggc gcggcgacgc ctgcgccctc 300
 gacgtcatcg ccatcaacga caccggcggg gtcaagcagg cgtcccacct gctcaagtac 360
 gactccacgc tcggcatctt cgacgccgac gtcaagcccg tcggcgacaa cgccatctcc 420
 gt 422

<210> 8538
 <211> 403
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-029-Q1-E1-G1
 <400> 8538

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 caccaccagg acggcggccg gtactcgctg ttcgcgccgg ggccgtacgg gcagttcacc 120
 acggagccct tcgcgttcgc tgggaacggc ggggtgtcgc tgacgctcgg cctcccgcac 180
 ggcgccggag gcagcgccga gcagaccgag tcgttcctca tgggcagcac cacggccggc 240
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 ttcgcggcgc agtcatgag ggacttcgtg gcctagctcc cttaggacgc atagcatagc 360
 agtcgtccac gcaattaatc aaatcatctc tccatcgatc aat 403

<210> 8539
 <211> 95
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-G3

 <400> 8539

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 aacaacaaaa aaaaaaaaaa aaaagatcaa aataa 95

<210> 8540
 <211> 317
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-029-Q1-E1-G6

 <400> 8540

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 aagcggagcc aggaccggga gctggaccat ttgcctcccc cttegtcccg ttaaacgggc 180
 cttaaatttc ccctacaca cataccggga gataaatctc tcacaaccaa cgtttgaaaa 240
 aaccatttgt aactaaattt ttcaaaaagc cacttgagaa ctaccattac atggctgtta 300
 tatttgggaa tcatcat 317

<210> 8541
 <211> 466
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-029-Q1-E1-G7

 <400> 8541

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 tccgccagct tccgccgaac ccgcttagg acctccttcc ttcgcggcag cgtgtcactt 180

aaagttgtgc aagtacggca gtcaaattgtc aacagattta agtgcaatag catacgaagt 240
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tttgaagacc ctgagaagat tctagaccag gcagttctgg agatgaatga tgacttgaca 360
aagatgcggc aggccactgc acaggtcttg gcattctcaa agcggcttga gaatanatct 420
aaagctgcag aacaagcttc tgctgattgg tatcggaggg ctcaac 466

<210> 8542
<211> 422
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-H1

<400> 8542

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aggggaaggg cacggctgga tccaagcgtc atcttcgaca tgatatctgt cgccaagcat 180
gtgagccagc agttcatctc cctcttggat tcagagattg ccgcccgcga agctgaagaa 240
gaggctcagt gattgatgaa aaggaaaaag gactgggtgc gtaaatgctc gtgtgttcca 300
acttcaacca aatgctgtag aaatcttcag gaatttggtt ccatttttat gttattatta 360
gtagtagtaa acaccgagga tttggattct gggaacgaac gacgtcgtgt tggctttggc 420
tg 422

<210> 8543
<211> 276
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-029-Q1-E1-H10

<400> 8543

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agacaccaat ggcctccgag acggcgacgg cggccacatt cgctctcgca tcgtcattct 180
cgcgcggcgg tttccttcgg caccttcttc gggccggcgg gccaaagcctt aatccctgc 240

ggtccttccc ttaaccctta aaccgcgggc ccgcgc

276

<210> 8544

<211> 426

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-029-Q1-E1-H12

<400> 8544

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aaactaagac agcaacatca acacacccaa caacagttca attcacccaa ccacctcctc 180

tccctgctct ttgatgtcgc cctcgcttct tcctccccga ccggccatca gttccgacga 240

ctgcttcctt cgtttgtccc tgcagccagc tgtttccacc gttcccaggg caatggtcgc 300

ggtcctccgc tcgttcgact actcacctgc cgtttccacc ggttggcagg ccgccccatg 360

accataacca gtagaaaatt aacgaagcta atgggtacag acacangaca gttctaaaat 420

gggact 426

<210> 8545

<211> 364

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-A11

<400> 8545

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gcattggaac cctgggcaac cagggtctcc ggcttctctt ggccaacttc acggtgcgca 180

acctcttgat ccgccactcc aacaacggct tccggatcaa gacttggcag ggcggctccg 240

gcgcgctctc ctccgtgtcc ttccagaacg tgcgcatgga cgcggtgcgg aaccccatca 300

tcacgacca gtactactgc ctctccaaga gctgcgagaa cgccacctcg gccgtcttcg 360

tctc 364

<210> 8546
 <211> 319
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-A4

 <400> 8546

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 gctgggcact gcttgctcct acggcaacta caatgcctct gctctggacc atcatccgtt 180
 gagagcaagg catgcgtcac acatgttcaa cctcgccatc agcgatgcgt gtctcgtaac 240
 agaatcagag caagcatcat gcagcagcag cagcagccag gactagaggg cgccgtcatg 300
 aagccatcag agcctgctg 319

<210> 8547
 <211> 382
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-A5

 <400> 8547

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 atgacgagct cttttctgaa ctaaaagata agtgggatgc aatggagaac aagtcctctc 120
 ttgccttgta tgggtgctgga gcaatcctcg ctgtctggat atccttggtt gtagtgagat 180
 ctctcgactc tgtcccgttg ctctcatgca tattggagct agtcgggctc agctaactctg 240
 gatggtttgt gtatcgatac ctgctttttc aggaaaatcg gaaagaattg gccggtgtta 300
 tccatgatat aaatagaagg attggtggcg atgatgaata actgtttcct ggtttggtac 360
 tccaattaac ccgcctggtt tg 382

<210> 8548
 <211> 149
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-B11

 <400> 8548

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 agagaaataa caagagcatc agtttctcc 149

<210> 8549
 <211> 448
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-B12
 <400> 8549

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 tccaaaaacc atgaagctgg tgcttggtgt tcttgcttcc attgcttttag tatcaagtgt 180
 ttcttgtaga cagacaggcg gctgcagctg ttggtcaaca acaaagccat gagcagcaac 240
 atcatccaca acaacatcat ccacaaaaac aacaacatca accaccacca caacatcacc 300
 agcagcagca acaccaaca caacaagttc acatgcaacc acaaaaacat cagcaacaac 360
 aagaagttca tgttcaaca caacaacaac aaccgcagca aacacaaca caacatcaac 420
 aacccaaca ccgcaaaaac ctttacct 448

<210> 8550
 <211> 344
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-B9
 <400> 8550

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 agggttcttg ggctgatgtt aaatacaaag gtgagtggat gaaaaggcca atctcagagg 120
 ctgaagtagc ctggcttgca aggattctga tccggctctc tgactgggtg aatgacgccc 180
 tggggcttga gtgtgctgat gctgaaggta gtctgctgg cgccacctac attcagtttg 240
 atgggaacac gacggtgggc gggccaaggg atgctgcgag aatggctctc ggtgctgtat 300
 gttcattcat ggtgctagtg gggcaagcgg tactgaagtt gatg 344

<210> 8551
 <211> 189
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-C1

 <400> 8551

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 atcataatac ttataaacia ataaccaaaa tttaaattaaa tgaaattagt ttaaaaaaaaa 120
 ccagaattag aaaaaccatg atcataaaaa aaaaaacact aataaaggaa aaatcatttt 180
 aaaagaaaa 189

<210> 8552
 <211> 365
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-C11

 <400> 8552

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 gtttgccgat cgaccgggc gacgtgagat acgagcggcg tcgaccgggg ccgggggagc 120
 cctccgaagc cgcagccgcc gatcgggggtt tccttcctaa ccggaagcgg aaaatgaccc 180
 aagacaagaa aacggaggca ccaacgggca gcacgccgcc gaacttaatt ggaggtggag 240
 ccgaaacccc ggggcccgcc ggctgaccga accgcacccg gtccctccct gtcgaggagg 300
 tccgtcgccg cgcacccctg gcacgacctc gagatcggtc ctgaagctcc ggccgtcttc 360
 aacgt 365

<210> 8553
 <211> 450
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-C3

 <400> 8553

 gggtcgacgc acgcgtccga gataatgtgc acagcagtgc aagagataaa gtacccggaa 60

aaagtgattc atatatgaaa gggaaacatg caaatgggtg agtacatctg ttgcattggt 120
 ctgttttttt gttgatttgt aaatctgggtg acgaaaatgt tcacgttatt tgggactttt 180
 tgagtattaa ccctgctatt cttcattctg atagtgaaac aagcagtgtc cggtcgtcag 240
 agtcattggc ttatcggttg atgacacccc tacccaactt gggaaccaat agtttgtcac 300
 ctccaccttt gagttcggcc tccagttctg gctctgcagc acatacaccg aacagtatgc 360
 atttttcagt cccataccat cagcctagtc ctttgccaaa gcctaacggg aaggaagcaa 420
 taaatttggt ttcgcattga ataacagcat 450

<210> 8554

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-D10

<400> 8554

cgggtcaaaaa ttaccgggtc cacgcacgcg tccggaccaa atcctgatga aagtgatccc 60
 tgggatgacc gtcgacaacg cggtgaacat catgcaggag gcgcatgtga atgggttgtc 120
 agtgggtgatt gtctgttccc agtcogaggc tgaggagcac tgcacgtcac tcagggggcaa 180
 cggcctccga agctcgatcg agcctgcgag tgggtggctgc taaggttcta gaaatgggtg 240
 tatcttgttt tgccaagtat agtttgtaaa taccagcat atcaatctaa gctgaaactg 300
 aaacggggttg gttacatgca gttatcgata caacgaagct aagtacctct tgggtaggtg 360
 taaatcttgt aagggttaacc tgtagaagaa gaaacatagt aattttgggt aatgatttat 420
 gaaccattta gtt 433

<210> 8555

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-D3

<400> 8555

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 ggagcatcag cagcggcagc agcaatggcg gcctccatga tcgcctcgtc agttctggcg 120

gtggcgccctc agggcggtgcc gcacctcggg cgccgcgcct cctccttcgc cgctcgtctgc 180
tccatcatca gcatcaagac cgacatgccc tacgggattg cgggtggcct gaccgtcgac 240
gtcaacgtca acgggagaaa cggcaagggc aaggcggtgt accagtctgt ctacaagtac 300
ggcgcgaact tcgacggata catccaatc tacaacgagg atgactggtc tccaacggc 360
gacgtctacg tcggtgtgaa cactgggctt ctgatctggg ctctcatcct cgctggg 417

<210> 8556
<211> 405
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-030-Q1-E1-D9

<400> 8556
cggtcctaaa ttcacgggtc cacgcacgcg tccgcaaaca gaagctctgc tcggtatatcc 60
cttcgatttc accacggcag gtgcggaaga acaagacgag cagcagctcc acgaacatcg 120
cgacaatctc tcgacttctg cagcagcagc cgctatgcct ttggcacaat tgcctgacgc 180
cgatcaacac cgggagattg tagataacct acgtaagagc agcacggcat actacacgct 240
ccagcagatt gttcgcctgt tggttctctt ccgtgaatgg cgtgaagagg aacaaacact 300
tattcaaatt cgtgcagaac gcaaggaaag aaggcgcatc tgccanacac aagcctgaca 360
ctcaacgcac gaaggcgctt ctagactcaa tatccaatgt ctctcg 405

<210> 8557
<211> 449
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-E1

<400> 8557
gggtcgacgc acgcgtccga ccacgacgtc cggctcgatc tccatctoga ccgtcgctca 60
ccgggaagct acgtacgac gaagcatggc gtccgtcacc gcccgcgccc cggtcgcagc 120
cctgcgcccg tcgtcgtcgt cggccttctt tggccactct agccgcctcg gccgcactgc 180
taccgcgtcg ccgacgaggc gcagcctaaa ggccggaggcc aaggcgaggt ggctcccggg 240

ccttccctcc cccgcctacc tcgacggcag cctgccgggt gacaatggct tcgacccgtt 300
 gggcctggcg gaggacccgg agaacctgag gtggtacgtg caggcggagc tggatgaacgg 360
 gcggtgggcg atgctgggcg tggccgggat gctgatcccg gaggtgctga ccaaggcccg 420
 gctgatcaac gcgccgcagt ggtacgacg 449

<210> 8558
 <211> 418
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-E10
 <400> 8558

ccggtcgtaa ttcacgggtc cacgcacgag tccgggggtg gcttctctc cccctccggt 60
 tcgggttcgg gttcgtgagg ttctccgggg ttcgggttcg tgggtgagcg gatcgagatg 120
 gcggcgtcgg atgttgagta ccgctgcttc gtcggcgggc tcgcttgggc cacggacgac 180
 cactccctcc acaacgcctt cagcacctac ggcgaggtcc tcgagtccaa gatcatctc 240
 gatcgggaga cgcagaggtc ccgcggttc ggcttcgtca cttctccac ggaggaggcg 300
 atgcggaacg ccatcgaggg catgaacggc aaggagctgg acggccgcaa catcacgctc 360
 aacgaggccc agtcccgcgg cgcccggtga agccgccggc ggtgggtacg gtggtggc 418

<210> 8559
 <211> 341
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-030-Q1-E1-E11
 <400> 8559

gtcgacgcac gcgtccgagg acacgtgggc ggacgcgtgg gccacgaagg agaacatccg 60
 gatggcgatg cactggctgg tgcagggctg cagctacggc aactccctgg tgttccactt 120
 ctggggcatc ggcgccagg tggcggaaga cgacggcgac aaggcggacg ggtacaacaa 180
 ggccatctgc ccgctggacg cgttccagac cgggcccatc ctggacgacg agatcaacga 240
 ggtcatcgtg cggccgctgg tgcacggcgc caggctgcac gccgtggtgg acgcctgcta 300
 cagcgccacg gtcttggaac tcccctacct gtgccgcatg t 341

<210> 8560
 <211> 463
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-E3

 <400> 8560

 ggctcgagaat aacgggtcga cgcacgcgtc cgaaaaaaag agaaggagaa aaaggaaaaa 60
 gaagaaaagg aaaagaaaga ggagaaaaaa cctgaaccga attttgaaat attgagtaac 120
 cctgctcgtg taatgaaaaa tcaacttaaa gtcactctgc ttgtcgattc cggaagttac 180
 gttccgctca aagatgtttc catcgccggc atcgatcatg ttgtcatgt caaggccgga 240
 tctgaagatg aacaacttgt ggagccagtt gctgcatttg gtcccaaagc tgatgacgaa 300
 aaggagcctg acccaccaga gccatttgaa tacaccgaag aataaaatcc aacattaaat 360
 tcaattatat attttttttc tacttttttt tctctcacta ataataatac attggattta 420
 ttcgtttaga aaaaaaatct atgtctaatt taatatatac tta 463

<210> 8561
 <211> 372
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-030-Q1-E1-F10

 <400> 8561

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 gagaaaaagg cagtgtatac attttacttg gttcgtgagc tatatgtgac tttccgcaac 120
 ttcagaattc gcattgcaga ttatgtgccc tacagaaaga tcacttccaa catgaatgaa 180
 cgctttccag atgctacatc agaagagctc gatgtgagtg atgctacatg tattattttgc 240
 cgtgaggaaa tggctacagc aaaagaaact gctcgatggg catctgttcc atgtgcattg 300
 tctaagagaa acaggagaac aggctaaaga agaggttcct ctacggcttc tccatgggag 360
 cttcagctcc ac 372

<210> 8562
 <211> 351
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-030-Q1-E1-F3

<400> 8562

gggtcgacgc acgcgtccga cccagagcag ttgctgtttg ttaaaaaacc caacccaaat 60

tttaaaggga aaggtggtaa ttgatgcaat tcgccctaata ttaacccccca aaacaattaa 120

tcttttggtca aggaccaacg gcaagacgac atcaaaattt tgggcaccta aataagccat 180

cgattcaggc tcttatcatg ggctgaacag gcactactac tcaattgcaa tcaattaccg 240

gaaaaatgag ctagaggaga aaatgttgtt gaacttgcac annaagaaat ggacagatgg 300

actaattttg aagaagtttg acactcactc anaaaacaaa cgagcagact g 351

<210> 8563

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-G10

<400> 8563

ggtcgacgca cgcgtccgat tgacagaggt gtatctgctg ctgctaaggt tgtcaggaag 60

gcatatccac aagagaaagt tggagtattt gtccagcgtg gaaagggtgg acccctctct 120

gtagttgaat acagtgaat ggatgcagct atgacaactg aaatcaatca aactactggc 180

cgccttcggt attgctggag caatatctgc ttgcatatgt ttactttgga ttttctgaac 240

caagtgacaa acagtcttga aaaggatagc atttaccatc tagccgagaa gagaattcct 300

tcagttcaag ggtacacatc aggattaaag cttgaacaat ttaaatttga tgtattcaac 360

tattctcctt caacagctct ttttgagggt ttg 393

<210> 8564

<211> 373

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-030-Q1-E1-G12

<400> 8564

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ccgtaaaaat aaatcttcac aaaaagatct tgctaattgc cgccagacat ttgcagagga 120
agatcaagaa aatttgtaca atcttggtca ggataaagct acttctggaa agcaggggtct 180
tggcatcaaa ggcttgccaa tgaaagttgc tggccaacgt tggaaggga acaaaacttc 240
gtttgttgat agtgatgatg ataattcagc ccagtcgat gagtattcag aaatcgaaga 300
gaatggcgat gaggaagaac atatcagtc ttctgaatca atagacacag ataagaatgc 360
agacaaagaa atg 373

<210> 8565

<211> 218

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-G5

<400> 8565

aggacgcgtg gggttgtgga gtaatacaac ttcctcatct accatttcag tcatccaaac 60
aatgccgaag tgcacctaca tgtcttcttc catctgtaat actatgctta ctatgtggac 120
atgtggttgc ctacagaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaagaaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaataaaaat aaaagaaa 218

<210> 8566

<211> 452

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-G6

<400> 8566

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gggaaggaga gagagagaga gcgagagaga gatctagtag agaggctagt aggtggctct 120
cgaacgaaga tggtggcgtt gttcagcggg caggtgggtg aggtgccggc ggagctggtg 180
gcggcgggca gccggacgcc gtcgccaag acgaaggcgt cgcagctggt ggggcgcttc 240
ctggccgcgt ccgagccggc cgtgtccgtg cagctcggcg accacggcca cctcgcctac 300
tcccacacca accaggcgt cctccgcccc aggtcgcttc cggccaagga cgaggtgttc 360

tgctgtttcg aaggggtgct ggacaacctg ggtcgtctga gccagcagca cgggctgtca 420
agcaagggcg ccaacgaggt gtcctcgtc at 452

<210> 8567
<211> 461
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-G8

<400> 8567

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tataaggata cgtgataaac cggctgcacc tactgtagat gtcaacaaat tgaaagaagc 120
cactaaacag ctaggcttgg gtctccgct gagtaggaca aggtcattat caggacacc 180
tcaagacttc aatcaggctc ctacacaacc aggaggtcca gccgcagctg tttccccagc 240
aatgccaaat tctgcgattg atttatttgg aacaaatact ttagtgcagc cgcaagcacc 300
cactagtcc acaggctcctg ttattgcagg catgggagtg acggctgggc cgattcctga 360
ggacttcttc cagaacacta ttccatcgca tcaacttgcg gctcaactac ctctcctg 420
aatagtctg tcacggatgg ctcaaccgc tctggcatt g 461

<210> 8568
<211> 410
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-G9

<400> 8568

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taagaaacat catcagtttt ctgatatgct tgttcaaacc tcaccagctg taactgggca 120
tgcctttcct agactgaaac tacggtacaa accatcactt gttcagagtg gaaggaaaga 180
cttgaagcta ggaatgcct tgatgtgtcc tcaggcgaaa catctggaaa gggggctttt 240
gctgcttgat gtgaggaatg attatgaatg ggatgttggg cactttgaag gtgctcagcg 300
gcctaattgtg gactgcttca gaagcacttc ctttggactt tcgggagaga tcctctaaat 360
ggtgtagaca aagagaggac agatatacta atgtactgca ccggggggga 410

<210> 8569
 <211> 436
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-H11

<400> 8569

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 ggaaacactc gagtcactga tcaagctaac gaaggaaggt atgaagatga aggttccacg 120
 gtatgacaag tctgcgtttg ggggaagggg tgaccgggct gatccttctg tatggccaga 180
 ggttgaaggg cccttagagg ttgttctgtt cgaaggatgg atgcttgatg ttaaacctcc 240
 ttccaaatga agttgtgaaa gaagtggatc cacagctgga ggtgggtaac aagaaccttg 300
 aagcatactc tgatgcttgg gacagggttca tccagtcatt gattgttatt aaaataagag 360
 aacccggtag cgtttaccag tggagactgc aggagaggt cgctatgaga gcagatggaa 420
 agcctggaat gtctga 436

<210> 8570
 <211> 338
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-030-Q1-E1-H9

<400> 8570

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 gagggaaaat ctgctgtaaa caggcagaga atggtctaca aggcctatatg ggaggagctt 120
 cagagcactg tgcattgctgt ggaccagatg actacaaaaa cgctgatga agctgctgcc 180
 aacaagtaat cgatagatgc acaatacctg tgaaagcaca gattatctgt gcttcgaaga 240
 tcaggccatt gcttggacca aattttttct cttgggtggt attactttgc gtgtcagctg 300
 aatggtcaat aatctgcggt atggatagcg catggctt 338

<210> 8571
 <211> 112
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-A1

<400> 8571

agcggacgcg tgggcgacc cgtgggaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60

aaaaaaaaaa aaaaaaaaaa aaaaacaaaa aaacaaaaaa aaaaaaaca aa 112

<210> 8572

<211> 374

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-A11

<400> 8572

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cgagtgattc atggaaggaa gtttccgaag agggtcgtct ggctttccat gcgctgttca 120

gtagagaaaa gcttccgcaa agcttttctc cccacaaagc agaaggctcg aaggaagttg 180

gcaaggagga ggaagatgaa gtcaccacag tggcagttga cctcaacaag agtaccacaa 240

gcattgatca tgacctcgac acaattggtg agccaagggc ttcctttccc aatgaactgt 300

cgccccctgaa gctgaaattg cgccgaacag gcttcaaacc atacaagaga tgttctgtgg 360

aagcgaagga gaat 374

<210> 8573

<211> 256

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-031-Q1-E1-A12

<400> 8573

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acccagagg ccgagaaata cttegcagca accaaagatg ctcttggcga tgttctcgcc 120

aagctaggct agacgcaagg gctaataatg gccatgtaat ttcggacttg tgtttgttca 180

tatggacccg gcaaggcaat gtaccatttt ctgttgatat tgtatcagga agcacttaac 240

tacaggaaan ccaacg 256

<210> 8574
 <211> 394
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-031-Q1-E1-A4

<400> 8574

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gtgaaggagg ccgagctaca ttctcagaag gaccaagaaa ggaagtctct tattgatctc  180
aagaactctg cagataccac gatctacagc attgagaaga gtgtcagcga gtacaaggac  240
aaggtcacct ctgaagtcac caaggagatc gagtctgctg tctctgatct gagggcagct  300
atggctgagg acgatctgga caagatcaag cagaagctgg aagcagcaaa caaggctgtt  360
tcaaagattg gagagcacat gcaacaaagt ggcg                                     394
  
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<210> 8575
 <211> 368
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-B1

<400> 8575

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cccacgcgtc agcccacgcg tccgcaagaa gaagatcaag accgacaagc cctacgggat   60
tggggggtggc ctgaccgtcg acgtcgacgc caacggggaga aagggaagg gcaagggcgt  120
gtaccagttc gtcgacaagt acggcgcgaa cgtcgacgga tacagcccaa tctacaacga  180
ggatgactgg tctcccaccg ggcacgtcta cgtcggtgga accactgggc ttctgatctg  240
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cctctccggc taaggatata caatgcatgc gcttcttgcg attcgctctg taaaatcagg  360
gtgtctgt                                     368
  
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<210> 8576
 <211> 324
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-B10

<400> 8576

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caacaggaac aacgacgatt acgacgacta ttgattatca gtgccaagct cctgctatac 180
ttcaccttcg tgtgtgctgt taatatatga cgaaattttt cccgtgcgga attctaggaa 240
cggagtgtac tgacgatgca tcaggagatg tatgtaataa ttttgtccag tgaaatgtaa 300
tgagcatagc gtctatagtt aaaa 324

<210> 8577

<211> 362

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-B11

<400> 8577

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gaggaaccct cagggctcca gcctgggct ggatgatgta caatgttctg gtgagcaatg 120
agaagtcgat ccagtctcag tacaagtccc acgtctacgc caacctgac aacgtgacgc 180
cagatatcat cgagagccga tacgagttaa ccaaagaaa aggcgcacgg ttcgtccccg 240
cggccttcct gacaggcctc cttgatcctg tccaatcgag ggaggagttt ctgcagttgt 300
tcgccaagtt agacgggagc gtaccagttc tggtagtgtc aacgggtcaat gctccaaga 360
ga 362

<210> 8578

<211> 450

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-B2

<400> 8578

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ctgggatctg taatttttcc ccccttcctg tgcgcgcgatg tcattgtgcag ggctgggtgca 120

gacctgggcg gcggtgatca tgggcgtggt cgcgggcagc gtgccgtggt tcaccatgat 180
gatcctgcac aagaaggtgg cgctgctgac gaggggtggac gacacgctgg gcgtcttcca 240
cacgcacgcc gtcgcggggc tgctgggagg cgctctcacg gggctgctgg ccacgccgga 300
gctgctggag atcgagtccc ccgtgccggg cctccgcggc gcgttctacg gcggagggat 360
ccgccaggtc ggcaagcagc tggcgggggc cgccttcgtg gtggcctggg acgtcgtggt 420
cacgtcgctc atcctgctgg ccatcggcct 450

<210> 8579

<211> 412

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-031-Q1-E1-B4

<400> 8579

ggtccagaat acccgggccc acccacgcgt cagaaaaaaaa atcatcctat cctgtcaaata 60
gttctttgaa atttagttca ctgtaggct accttcaaag atatgattgt aatctgcagt 120
tttgaggcca tcacaatgga gataggactt tgcagttgaa cttggcggca aatgatcgga 180
ctttgtatcc cacattatct gatgaatggt catgttggtt aagtgttctc ggttctcact 240
atcaaattga tagttaccag agggggtggt cttgctgatt gcagatctct angtgaggata 300
cttgcatggg caccgaaaga tccagatcta ttcaaacctt caacaacctt tagctcattg 360
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<210> 8580

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-B7

<400> 8580

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actggatggt caccgcaagg ctttcatggg gatgtaagca tgattgaaca aacaggaaat 180
aaatattggt ctgaacgttt gacagatgga gctaatgaat tagccgtaag tatacaaaat 240

agtactcaat ctaagcaact agaatcaaca tcagattcgg ctgaagatac catggatgat 300
 agagagcagg ctgatgctaa aaggatggaa acgatatttc attttatgat cgcatctttg 360
 aagtctgggc gatcttctgt tctactggac actattatta ggcttgtgta cccaattctc 420
 tcactacagg aa 432

<210> 8581
 <211> 354
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-B9

<400> 8581

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 ttcctacagc tgttcgacta catccagggc aagaacgcgt acaaccagac gatcgagatg 180
 acggcgccgg tgctgacgcg ggtgtcgccc agcgacgggc ctttctgcgc ctccgccttc 240
 gccgtgagct tctacgtgcc ggccaagaac caggcggacc cgccgcccgc cgagggcctg 300
 cgcggtggacc gctgggcccgg ggccaggtac gcggccgtgc gccgcttcgg gggc 354

<210> 8582
 <211> 323
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-C1

<400> 8582

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 aagagatcga gcttcttttg caccacaagg tccaggatgt cttgcaactg cggatcaagc 120
 tgcggtcgcg gctcaagctg caagtgcggc aagaagtacc ctgacctgga ggagacgagc 180
 accgccgcgc aggccaccgt cgtcctcggc gtggccccgg agaagaaggc cgcgcccga 240
 ttcgtccaag ccgcgggcga gtccggcgaa gccgcccacg gctgcaactg ccgtggcaac 300
 tgcaagtctg acccctgcaa ctg 323

<210> 8583
 <211> 451
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-031-Q1-E1-C2

 <400> 8583

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 aaccctagct agcaggtcgg aggcgagaga gcagccatgg cgcggtgcct cgcgctcgtc 120
 tccctccttc tcctcggcct cgcctccgcc gcctccgctg ccgatgcgcc ctttgtcgtc 180
 gcgcacaaga aggtttcgtc ctcccgcgcc aagccgggcg tcgagcgcgt cgcgctctcc 240
 ctcgacctct acaaccaggg atccgcgact gcctatgatg tgtcacttaa tgacgactct 300
 tggccaacac aagcatttga gcttgtcact ggagagaaat cgaagacatt ggaaaggctt 360
 gaccctgggtg ccactgctac acacacatat gtcctggaga acaaaacaca gggcaagttc 420
 caaggttcac cagctattat tacgtaccgt g 451

<210> 8584
 <211> 418
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-031-Q1-E1-C3

 <400> 8584

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 actgatctct ctggccgtaa atggctcgga agttgcaaga acagagccac caaaaccgcg 180
 ccacacagca ggcacatgtg atcgatcgag agcgacgact gaggacaagc cgcgcggcgc 240
 tgcgacccag cggcgcgacc gacgcggacg ggcgcgcggc eggctctgcc cgccctgcag 300
 ctccacccac cggaaccgaa ttaaacaccg ccgtcgccgc ggctggggct tgcgctctcg 360
 acagacaggc catgcgcgcc acaaggctgt tgaccccggc caagccggcc tggcatgt 418

<210> 8585
 <211> 449
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-C4

<400> 8585

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gcgaaggagg gcgggcacca cgagaccgtg agcctggggc tgccgtccta ctgctgctg 180
tgcaccgtgc tgcagtcgat cagggccggg tccggggggc tggtgctggg cagcttcgag 240
gtgaaccagc acaaccggcc gcaggaccgg ctgctggact ggttcttcca cccgtgctg 300
gtgctcaagg agcagataca ggcgctgagg atgaccgagg aggaggtcag gttcctggag 360
aagctgaccg tcttcgccgg caacgtcgcg ggcgctgggg cctggcggtt ggaagaacgg 420
cgccgggatg atggtggtgc cccaggacc 449

<210> 8586

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-C9

<400> 8586

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cgcaatggca ctgctgtccg cctcctcgtc ctccaccacc gccgtcgcg cgctcgccag 120
gaatgggcag caacgggcgt cgtcgctggt gttctcctcc tctcctctt cctccttcct 180
cgtgggcagg acgctgctga ggcaggccga ggcagcccgg ccgtcggtcg ccgtgcgcgc 240
cgcggcggat tccgacaggc cgatctggtt cctcggttagc acccctccac cgtggctcga 300
cggcagcctt cccggcgact tcggctttga tccctgtggc ctcggtatctg acccggagag 360
cctgccgtgg aacgtgcacg ccgggct 387

<210> 8587

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-D2

<400> 8587

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 cgcgcccact tgcgacggcg atggcttcgc cgtactcgct cagctgggcc gacgcgccgc 180
 cctaccacta ccacgggaga cccagccag cgcccgactc acccgcatcc tccgacgggg 240
 ccgggccccg ctgctcttgg atcgggggcc tgctgccatg gatggacgag gactacctct 300
 acggctgctt caccacctcg cgcgagcttc tttcccttgt catcaaacgg aacaagcaga 360
 ctggccaatc agagggtttt ggcttctctca aattttctga ccaatacggc 410

<210> 8588
 <211> 415
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-D3
 <400> 8588

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 ctcttcaccg cctgcaagag atcaagcgct tctttgaaga ttacaagaaa aacgagaaca 120
 aagaagtgcg agttgatgca ttcttgcccc cgacaacagc tcaagaagcc attcagtact 180
 ccatggacct gtatgcccg tatattttgc aaagcttgag gcagtagatt gcaagcaaca 240
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 attgggaacc ttggaattga gaacagcgtc actagctgtg attcgctcct ttctcgtaa 360
 attatcatat gaataggcca agtccatacg tttaccgtgt ggcgctctgt cagtc 415

<210> 8589
 <211> 180
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-D4
 <400> 8589

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 gaaccaatta gcagtaccat cacatataga agttcaaaat tgggactctt tcttggtgag 120
 taacagaatt gcaaattcag ctaaaataac ttcgagttca ctcataggt ctcatattgg 180

<210> 8590
 <211> 422
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-031-Q1-E1-D5

<400> 8590

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 ttggtgagat ggaagaagca cccgctgtga cgcaactgaa aacacaacga ctgattcaga 180
 agccgtaaag cgactgtact tcgtgcggcg gcaattttgt agagtttttg gctcaccggg 240
 tggctcattc tttcatgcgt ttttattttt tattttttta actgtcacag tccttcgtca 300
 ctgagaaata acaagtgggt gtccacacc ctcttgcaac tgtaatctgt aagcaagagg 360
 ccctccctgt tcggtctata tatatatatt gaatanaacc gggacgcttt tgccttgccc 420
 tg 422

<210> 8591
 <211> 205
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-031-Q1-E1-E1

<400> 8591

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 cttcgcgtgg ctaaaactacc tccgaggaag ggggtgcccac gctgcaaaa atcccgcca 120
 tggttggtcc acagtgtgga tccaggatta ttcggcttgg ggatagcgct caaccagttc 180
 ggttacatga tgtcccgcaa agata 205

<210> 8592
 <211> 344
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-031-Q1-E1-E10

<400> 8592

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cttgatgtct tgagcaggac gctgacgttg ctctcaagt atggtacagt cgtctgagca 180
ttgatgctta gatgttgatg gttttggtga tgtacctccc atcatttgcc cttttgttgt 240
gtatagtacc taggtgattg tgcgatgctt tgtaatgtct tctcagctg gtccttatac 300
cgtcctacta tatttgcta tgtatacccc gggtttgata gttt 344

<210> 8593

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-E2

<400> 8593

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ggcacaatgg cacatacata cagtataca gctgcaatat acatgaacac cttttgtctc 120
gctcctgctt tatctatgca actgctggca tgcattgcaa agacgcctcg ggagataaga 180
cccctgttat tctgctagta cgtatgcatg catgtgcacg atcgatgggc gcgatgggtca 240
tatcatccgt tggttcagta gtagggctgg atcttccagc gctggggcaa tcccacccgg 300
tgcgcctggt gccctacaac ccgactttt tggacgaatc cgtgctgtgg accgagagcc 360
gcgacgt 367

<210> 8594

<211> 382

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-E4

<400> 8594

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caaccaaagg ttccaattg ctggtgcttc caacctgttg gctaacaccc tttatccata 120
ccttgggatg gaactgtcaa ttggtacaat gatccctgga tgggatgaga aggttcctgc 180

cttggtactat gttgacagtg aggggtgcgcg gctcgtgggg aacaggttct ctggttggtc 240
 tgggttcactg tatgcttatg gtatcttgga tgatgggttac cgcttcagca tgtcagttga 300
 ggaagcagcc gaattagcgc gacgggctat ttatggggca acattccgtg atgcagcaag 360
 tgggtggttgt gttagtgttt ac 382

<210> 8595
 <211> 410
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-031-Q1-E1-E7
 <400> 8595

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 ccaggggagct caatcagcca cgagatgagc tacggaagac agtgacagag ataaagaaag 180
 atgtccacac acagctggaa caaacaagaa aaaccaacaa aaatgttcat ggcatgtgcta 240
 aagaactcag gaagttgcac agagaaggca tcaacaacgc taaaaactct gtaactgttg 300
 ttgctgtgct gttcgcaaca gttgcttttg cagctatatt caccgtacct ggtggaaatg 360
 acaataatgg acttgcagtt gttgtccaga ctacgtcctt taagatatte 410

<210> 8596
 <211> 150
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-E8
 <400> 8596

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 gctcaagatg tttcatcctt acatagtcct gcaagatata tcgtagctct tcaataatgt 120
 caactagcat tcaattcaca ggccgatcca 150

<210> 8597
 <211> 373
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-F1

<400> 8597

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gaaggacctg tacgggaaca tcgtcctcag tggagggacg accatgttcc ctggcatcgc 120
tgacaggatg agcaaggaga ttactgccct cgcgccgagc agcatgaaga tcaaggtcgt 180
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tacgttccag cagatgtgga tatccaagga tgagtacgat gagtctggcc ctgctatcgt 300
ccaccgaaaa tgcttctgag ctagctatct gccgcgcctt tcatagcgtg tcaagctgtt 360
gagatctgcg ttg 373

<210> 8598

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-F3

<400> 8598

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ttcaaccgga tggctgagca gctacagaaa agtgctcaaa gcacaggaga acagggcaca 180
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atgctggaaa cttttagtag tccatcacat aaggagcagc tggaagagcg tatgtctcgc 360
attaaggaag atccagctat gaagtcaatt cttgatgagt tagagaatgg gggcccttct 420
gcaatgatga agtac 435

<210> 8599

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-F9

<400> 8599

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 caaagccctc cactacaagg gaagtaagtt ccacagaatc atccccagct tcatgctcca 180
 aggaggtgac ttcactctcg gggacgggag ggggtggtgaa tctatctacg gcttgaagtt 240
 tgcggatgag aacttcaaga tcaagcacac tgggtccaggc cttctgtcca tggccaatgc 300
 cgggagagat acaaacggat cccagttttt catcaccaca gtgacaacaa gttggttga 360
 cggaagcat gtggtgtttg gcaaggtggt gtctggaatg gatgttgtg 409

<210> 8600
 <211> 93
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-G11
 <400> 8600

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 aaaaaaaaaa aaaaaataaa aatatgtaat aag 93

<210> 8601
 <211> 443
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-031-Q1-E1-H1
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 cctaagtgag aaggtcaagg tgctggagcg gaggtggca cgcaagaaga gaccaaaggt 180
 gaggggtgcac aagccatcca ggcattcttc ctgtgtccac tgaaaggata agtctgtaag 240
 gttttgaggt tttatgttgt atggatcccc atgttgcttc ctgtgtccag ctattgtgca 300
 ctgtgtaggt atagccatgc tgtggcactg tgcttcgtct tggacaacac aaggtgtggc 360
 atgttctgta ttttatgtct gtataatgca tccaactaca tctaattgtc tgtgaacaat 420
 tgattgggac aaatcgatat gac 443

<210> 8602
 <211> 388
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-H2

<400> 8602

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ccgtgccctt tactcataaa tttcgacatg ctgacccctt ggctcttcgt cttctagagc  180
gtttgcttgc atttgatcct aaagaccggc ctagtgcaga agaggctcta gctgatccat  240
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agattttgga gtatcatcca cagatgct                                     388
  
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<210> 8603
 <211> 410
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-031-Q1-E1-H9

<400> 8603

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ttcacgggtt aaaatccact ccttaaaatt caacataaaa aaaaaaaaaa aaaaaaaaaa  180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  240
aaaaaaaaaa tctaaaaaaaa acagtaacct aagaaacaat gtaaaatatg aaaatgaaat  300
aaaaaaaggg ggggccccca aaaagggttca aattaaagta tcgggtaaag gaaaattaaa  360
acctctccaa aagggccccc aaatttaaata taagggggcg ttttttaaaa          410
  
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<210> 8604
 <211> 362
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-A10

<400> 8604

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ttcaagctac agcacctagc catgcatata tatatagtgg ctattcgtca agttatcggg 180
ctgctagata caaatataat aagagcggat catcggggaga caaagacgca tgtcagctat 240
tgtctcgttt tctaagcaac gagcgagagc tgcattgcgt ggttagattt aatatggata 300
ttgcccatac gttatgtaat taaatcaaat aaatgttaag ttcattatga atgtgtcgaa 360
aa 362

<210> 8605

<211> 228

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-A11

<400> 8605

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gcagcgtctt atcttaattg ccttgttgtt caatgatgaa tcgatcgaat tcccttggtg 180
tagctttatt attgttgttg ttattattaa ttgactcgc tataaaaa 228

<210> 8606

<211> 391

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-A5

<400> 8606

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aaggcaccga ccgccgtgc caagaaggat gagaaggccg tcaacgccgc gcgccgtcc 240

ggcgcggaga tgcagacccat gaagaagttc aacgctggta tgaacaaggc ggcgtccagc 300
 ggcacatccc tcaacaccaa ggcctcgcac gacgacacag agaacctcgc ccatgagcga 360
 gttccaagtg acctgaagaa aaatctcatg c 391

<210> 8607
 <211> 413
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-032-Q1-E1-A8
 <400> 8607

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 cgagcgcggt ggaagatctg gacatgcagc ctgctctcgg acagatcatt aacatcaagt 180
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 atactgtgac agtagatgac ctcatcagg taattactcc gaatggaaca ccatccatgc 360
 ctgagtcact gaaggcagaa ctctgcaac tcacggggtc catccttatg tcg 413

<210> 8608
 <211> 420
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-032-Q1-E1-B1
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 ctgcagcaca tcggcaacac caccggacag tgggacctct acggctctga cgcgccctcg 300
 ccctacaacc cgctacagag caagttcttc gagacgttcg cggctccgtt caccaagaga 360
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<210> 8609
<211> 416
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-B3

<400> 8609

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aagcagcaca gcggggccaat cccggcgagc acgacgggga cgggcaaggg gtcagcggcc 180
gatccccggag agaagctgat gagtaagctc agggagcagc ggcagaaggt gcgacgggtc 240
atggaggggat cgctgtggaa cgctcgccgc agcaaggcgg cgaggctcat ggccaagtgc 300
gtcctcgccg tgctcgcgcg catctccctc gcctttgccc cgttcgttcc aggccttccc 360
ccttggaacgg taggacgcgc gtgggcgctc ggtcactcat ccggatcggc ccgtta 416

<210> 8610
<211> 297
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-B4

<400> 8610

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aaacagtctc attgctaatt gtttcattat tactacaaat cttggtcaag gcgtgaatat 120
ccttgctctt gatataatta tagtatattg aatccctatt gtgtttttta ctttaagtga 180
aaatgttgca aagaaaccat tagatacaag gataagcggc agaaggtgca acaggtcata 240
aaaaggatca ctatggcaca tcaactcaaag gagtgaagct aagctcatcg tcaattc 297

<210> 8611
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-B9

<400> 8611

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ggccccctcta ggatctaagc ttatatattcc ttgtaatgc tttctcacat ctcttatatt 180
gtctcccaaa tttaattctc aggggctctt ttttaaagt ttcgactggg aaaaacctgt 240
gtttttccaa atttaactcc ttttgcaaca taccctttt tcaatatggg gttttatcca 300
aaagggcccc acagctttcc cttttcaaaa tttttgcacc cttaaaggg aatgtgacac 360
cccctatttc gcggcattaa acccgccgtg tgtgaggggt tttccca 407

<210> 8612

<211> 398

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-C10

<400> 8612

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaataaaaa ataaaaagat aaaaaaaaaa aaaaaaaaaa ataaaaaaaa aaaaaagggg 180
ggggtcgccc taagggttca aactttattt ccccggttaat tggattttta acctcttcaa 240
agttgtcccc aaatttcatt tcaggggctt tcttttttaa agttcgtgct gggaaaaacg 300
ggggttttac caaattttac ccccttaaag aaaattccct tttcccaa at gggggttata 360
tgaaataggc ccgattcatt tccctttcca aaattttt 398

<210> 8613

<211> 349

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-C11

<400> 8613

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gtcttcacaga cttcgatcca ctaaggcacc acaacgatta ctgtccttgg gtgaatggca 180

atgttgctgc tgcattgtgt ctgagtaccg gtctgagcac agctctttca ggctggcacc 240
 tcacggtaga tgccatccag actctgcaat ctcttggcca ggctcacaat cagacgatgc 300
 agtcagactc tgcggcttca ttacagaagg atcatcacgt cccgcctat 349

<210> 8614
 <211> 407
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-032-Q1-E1-C2
 <400> 8614

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 ggatcaagct gcggctgcgg ctcaagctgc aagtgcggca agaagtaccc tgacctggag 180
 gagacgagca ccgccgcgca ggccaccgtc gtctctggcg tggccccgga gaagaaggcc 240
 gcgcccagat tcgtcgaggc cgcggcggag tccggcgagg ccgcccacgg ctgcagctgc 300
 ggtggcaact gcaagtgcga ccctgcaac tgctgatcac atcgatcgac gaccatggat 360
 atgattatta tctatctagc ttgtggtggt gggtgaacaa taataag 407

<210> 8615
 <211> 188
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-032-Q1-E1-C4
 <400> 8615

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 cgagcgcaag gggcttagcg tatgctagtc aaagaatata atttggtggc ctatatctat 120
 agtttgatgt agtatgtcct gtantangaa cagtaatttc ttactgtgag ttagtttacg 180
 gttcaaaa 188

<210> 8616
 <211> 443
 <212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-C6

<400> 8616

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cactacacgt tagaggatcc ttcatttcgt tacgtgtttc ctcatgccta taagcatgtg 120
gatcagtggg tgagaagcca cgaagggtgac tgcaaggcta taataaattt gtacaatgag 180
cagttgcttc aatcactgca ggctgataat gagttgagga ggattgcaca tgacatctca 240
agtcacggga ggtatacggg ccgtttcatt actacgaagc agctagtaaa ggatggacgg 300
aatccagagg cagtttttga cattctaagt ttgagggtaa tcttgaggcc tcggtgtggg 360
ggcaattcat ctgattgggg ccctagggct tgccacagga cacatgacgt tattcacgcc 420
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<210> 8617

<211> 404

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-D1

<400> 8617

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ccccgtctcc ctctctcgct tctctggcgt cgttctctgt cgcgaggctc ggggtgcgcct 180
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cacagccgac ctccctctcc gccagggtggc ctgccgcgcc catgcgtccc tggggaaccc 300
gtggccactc caggccgacc acgcgcgttc tctgcactgc tgccggcagc gtccaaagag 360
aggggaaaga actgctagtt cagcatttgc ttgttggtga aaag 404

<210> 8618

<211> 335

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-D10

<400> 8618

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agcctgtgaa taaatggaga agaacaaagg taaaggagaa cagcaggttg cttgcattag 180

gccatcagtg tacctctttc catctggctc tcgtgttgcc ttggttgat ttgtgcttaa 240

tgtagccatg aagtgtgtgg ccataatagg acgcattgtg tgtgtgtggc cctctccctt 300

agaagtgatt aaaagttgca tttggaccac atgtt 335

<210> 8619

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-D3

<400> 8619

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acaagaagag gaagaagagg tcgtgagcgc gtcgagaagg gaagctcttc cacttcaca 180

tatgcatagg agtaactgct ggggttcctt cctggggtgg aagtgtggaa ctgagctgag 240

tgttcagaag tgttcctttg ttccgcacct ttgttctctt cctctcttga tgagtctgta 300

aatagctatg tcaatctggt taagcttggg ttggttgccg gtgcctgtgt tcgctggcct 360

ttggatagaa tgcaaattaa agatgttgct 390

<210> 8620

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-D5

<400> 8620

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cctacccat ctccggcgcc gctctcgcc cctacatctc gtattcccc tcgacgcgtc 180

agcgaggcgg ctgcgccttc gccgggccc gccaccttgt tcggccaagt tcggcaagtt 240
cgacgcctcc gacgctccgg cggaggccga ggaggcggag ggcgcgacgg atggtgggct 300
ggcgcacccc gtggaggagg accatagttg cttggcatct gatttggagg gcgcgattcg 360
gcagtcaggg aacgctagcg cagatttcgt aaactccgga ggcacgag ctatcg 416

<210> 8621
<211> 388
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-032-Q1-E1-D8
<400> 8621

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aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaataaaa aaaaaaaaaa aaaaataaaa attaaagggg ggggcccttt aatgttttta 240
aatattttt attttaaatg taatttatat gatttttttt tggtttaaca aaatttaatt 300
tctggggggt ttttttaaaa ttttatgatg ggaaaaacct tgggtttatc caatttttat 360
ccctttaaaa aaaatccctt tttctcaa 388

<210> 8622
<211> 143
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-032-Q1-E1-E1
<400> 8622

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ccggactaac atgatcaaag gcttacgtac gcgttcaatg cgactgcaat atctctgcgt 120
ataatgacaa cgtaacttca ctt 143

<210> 8623
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-E10

<400> 8623

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accgaggtcc tccacctgct cgagtcccct gatgctctca agtccaaggt tgctgaggcg 120
atggatgttc tccgcaatgt ggcccaccag caaaacccaa acctcccgac cagtcagctt 180
gccgcattat cactgaccga aggcattatg tcctaacttg aaggccataa caaactatct 240
tcagtttcca actcagtgcg ggtgtttcca gaggttgtct ggcacatgac agtattgttc 300
cttcgatact atggttggac ttgtgaatgt tgtttccata ctggatgtta ggttttattt 360
gcgccctacg gtgacctgcc gttaaggcaa agaacttatt tgcaagtctg agcactattt 420
tggtgggttg ggttggg 437

<210> 8624

<211> 401

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-032-Q1-E1-E2

<400> 8624

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ggcttactac caggaggtgg actactgctc ggaggangtg aggtcgggtg ccccgcccg 120
cttcggccgc caggaggcg gcgtccagca gcacgtcgtc aaggagaagt tcgaggaggt 180
cgacacggtc tcacgcgccg gcgccaacca ccaccaccac caccatggtc accacggcg 240
ccacggcttc gtggtgcgcg agaccagggt cgaggaggac atcaacacct gcaccggcga 300
ggtccacgag cgcagggaga gttcctcgc cagggctaac tgagccgcc ggcgcccg 360
atccacgcc gttcgtgcct gcctgcgtgc cttatgtatg t 401

<210> 8625

<211> 407

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-E3

<400> 8625

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tcgccccgtt gccccgcggc tgcgcctctg ctggcgctgt gcccgtcgtc cggtgcgctc 180
ggtcgtcagg ctccacgata ccgacaggcg ttgctgtcac ggccgacgtc gccggtcatg 240
gcgccacgga cgaggtgccg ggaattgttc aggctgtgca ggacgcatgt gaaatagttg 300
aggacaagta tcctgtggac agcatccgtg tccctgccat cgtcgcgctc tggacggtat 360
tatgtgccat caaggccatc gactagcttc ctgctctgcc tgggtgtc 407

<210> 8626
<211> 379
<212> DNA
<213> Zea mays
<223> Clone ID: LIB189-032-Q1-E1-E6
<400> 8626

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atttgacag tactcataca gacatacaca atgtatctgc acggcaaagt gtcaggtagc 180
agggcaagct aagctaacaa tcgcctcact tgtttccgag tccgaacaag gacttgatgg 240
cgttgatggc gttctcgttg atgaacgact cgtcgtaggt cttcagcaag ggctcgaact 300
cctccgactt cctcaggttc gcgagatccg ggtcggtgcg aactgccttg aagtcttcat 360
accctgactt gagcgcatc 379

<210> 8627
<211> 362
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB189-032-Q1-E1-E7
<400> 8627

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tatatatcat atatgcatgg acaggtaaaa tgccctctcca gcagcaccag caacaagggt 120

ggtttagcagc agggactata aacaacagag taccatccgc gttgatagat ttttattact 180
gcaaaattga tccccgcagc actaccggta gttgcggtag acgggagtgt acatgcagtt 240
ctctgcatat ttcaccaggt cgctgggggg aggcagacgg gtcgccagac cgagctcgta 300
ggcttttgca gccacggctg cancgatgtg cgcaaagatc tttctgatgc tggatgaagg 360
tg 362

<210> 8628

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-F1

<400> 8628

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tgaagcccct gctttcgttg agcaggccac tgagcagcaa attcttgcta ctggaatcaa 180
ggtcgtggat cttcttgac cctaccaaag aggtggaaaa attggtctct tcggtggtgc 240
aggagtgggt aaaactgtgc tcattatgga gctgatcaac aatgttgcta aggcccatgg 300
tggtttctct gtgtttgctg gtgttgaga acgtaccctg gaagggaatg acctgtacag 360
agaaatgatt gaaagtgggt tcattaagct aggtgacaag cagagtgaaa gcaagtgtg 419

<210> 8629

<211> 303

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-F10

<400> 8629

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ggtactgttc ctgattctcg ccggccttcc actgcggctg ctggtggggc cccagccta 180
gtcctgccc tacaccgtcg cgccaaacgg ggccgcacat cttttcgcgg ttccggtcat 240
ggaaacaacc accggcagtc gcggccgccg gataccttcc cttaaacct ctgatgccgt 300

ttt

303

<210> 8630
<211> 402
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB189-032-Q1-E1-F12

<400> 8630

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tagtctttct ggcatttgat gtgttttttg ttgtattctg tgttgctctg gcttgattta 180
ttggtattgc tgtctgttgt tgccttcctt gtatcatagc aattctctat gcagtatctg 240
atcaggaagg agcatctgaa gatgacattc gtcaaattcc aagatacaaa tttcggcgga 300
cggatgagcc tgagaagcaa gatgttgacc ccattgggtcc ttttgggtga ataattgatag 360
agtgtggcac caatcaacct attgagaaaag tgcttgacgc tg 402

<210> 8631
<211> 460
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-F3

<400> 8631

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ccgccaatac caagcgacat cagcccgcgg agcgtctctta cgaaaacaac taaaccaata 180
ccactaccaa ctaagcaata atgggtctca tgtggactaa aggcttcggc ggaaagcacg 240
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tcaagggcct gaactgcttc aagtaaaact cccaagttcc tacgattatc agcacacggg 360
aacagcgacg gaattctact ttcggttctc gactgccttc aagtgttttc acctttgttc 420
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<210> 8632
 <211> 429
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB189-032-Q1-E1-F5

<400> 8632

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 gctatacgcg acctcagttc gggcgcaagc tacaacccc accaggcgag aagaagcatc 180
 gatagtgtga cgagctaacc caccaccagc aacgtaatcc aaatccatgg acaaccagcc 240
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 caagaacca 429

<210> 8633
 <211> 440
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-032-Q1-E1-F6

<400> 8633

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<210> 8634

<211> 404
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB189-032-Q1-E1-G2

<400> 8634

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ccacggcgat ggccggcacc cccatcaagg tgggctcctt cggcgagggc cgcatacca   180
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tccccggcga ctacggctgg gacaccgccg ggctgtccgc cgancccgta gaccttcgcc   360
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<210> 8635
 <211> 384
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-032-Q1-E1-G5

<400> 8635

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gcacaaccac aatgatgcgg gggtcctccg ctgtactcgg acacagtcgc caggagcgac   180
acctcacgag atcaatcagg cgcagataca accacatatt ccatcgccac ctgcttcccc   240
agcacttcaa cattcagcta ttgatgtatc tggacatcat agcttaccac atccactggg   300
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<210> 8636
 <211> 371
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB189-032-Q1-E1-G9

<400> 8636

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cgccatggcc catgaggtgc tgctgggcgc atgcgacggt gggctcgtct tcgatcccag 300
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<210> 8637

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-H10

<400> 8637

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gtcggagggc ctgccgcggg gccaggccat cggcgggtac atcttcgtct gcaacaacga 180
caccatggac gagaacctca ggaggagct gtccgggctg ccgtccaggt acagggactc 240
ggtgcgggct atccgcccgc gactgcccct cttcctctac aactactcca cgcaccagct 300
ccacggcatc ttcgaggtac agtacagcac agcacagcac agtagccact agccagttcg 360
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<210> 8638

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-H12

<400> 8638

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agcagcactg cctggcccgc gagatcgtga acctggtggc ctgcgagggc gaggagcggg 120

tggagcggca cgaggtgttc ggcaagtgga aggcgcggct gatgatggcc gggttcagcc 180
 cgccccgct cagcgcgctg gtgaacgcca ccatcaagac gctgctgcag agctactcgc 240
 cggactacaa gctcgcgag agggacggcg tgctctacct cggctggaag aacaggcccc 300
 tgatcgtctc atcggcatgg cactagtgtt gacttcagag aatgttgacc tgatggagaa 360
 tgtttcttgt aaccttcgaa gtacctctta gtggtttaga tatgtttggc t 411

<210> 8639

<211> 430

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-H3

<400> 8639

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 gtttcacttc ccggtggtgg cgatgttctt gagggtagtg agtttgtaca tgctgctgct 120
 ttagtaagtc agtcagcact tttctcaaag ggtcttgctg aaccacgcat gtcagatgct 180
 gccatggttc acccatctga ggtagctgcc aaagggtcac gttggaaaga tttgtttgaa 240
 cctggagtga ggcgtgccct gttagtcggt gttggaattc agatccttca acagtttgct 300
 ggaataaacg gtgttctgta ctatacccca caaattcttg agcaagctgg tgtggcagtt 360
 attctttcca aatttggctc cagctcggca tcagcatcca tcttgatcag ttctcccact 420
 accttactaa 430

<210> 8640

<211> 404

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB189-032-Q1-E1-H8

<400> 8640

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 agggttgtcg gaaagaacag cgttgatcgc ggggaacaca ggggcgcaca aaaaaaccgg 120
 cgaccctttc caaaaaagg tttggtatga catcaaggca ccgtccgtgt tcagtgtgct 180

caacatcggg aagactctcg tatccaggac acaggggtacc aggattgctt ctgaggggtct 240
gaagcacaga gtctttgagg tttgcctagc tgatcttcag ggcgacgagg atcannctta 300
caggaaaatc aggctccgtg ctgaagatgt gcagggcang aatgtgctca caaacttttg 360
gggcatgaat ttaccactg ataaactcag atccctagtg aaga 404

<210> 8641

<211> 410

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-032-Q1-E1-H9

<400> 8641

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gaactgttaa gcagggaaat acaagctgga aaagatgagg tccgccactt gaatgtgac 120
attgctgaca ttaacactga gaaagaagct tatatcagta agcttatgga caagaggagg 180
aagcttgaag ctgaacttgg agcaagtgag cacttgtgtg atgaggtcag gcattctcgt 240
ggtgaaattg acaagctcgt taccgctcgg aaagaactat ctgcagaggc tgcattcttc 300
gtggaagagc tgaacaggga gcaatctgtt aaacagcagc tacctgtgct gaaaacagaa 360
attgatggtc tgcaacagga acttgttcac gtgaggactg cttgcggggt 410

<210> 8642

<211> 269

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-A4

<400> 8642

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aggtaaccgg cggacctgat gtccccttcc accctgggag gcacgacaag cctgagcctc 120
gaccggaagg ccgccttctt gatgccacc agggtgggtg atcacctcat gcacgttttc 180
tccacacaca tgggtttgag ccaccatcac attgttgccg tttctggtgg tcacaccctg 240
cgaatattcc acaaggacag gtctggatt 269

<210> 8643

<211> 355
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-B3

 <400> 8643

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 cctatagagg cctcgtcctc cccctccg cgaaaaccga ttccccgatt cctccggcg 120
 tgtccgtggt cccttactgc aagcaaggac acgggggggc tatcgagctc cgttctgaag 180
 cggcaagaaa gatgattaat cttttcaaaa taaaggggtca aaagaaataa tacgcaccaa 240
 gtgctgctgg aaaggcccct gttaagaaac aatctgctgg ggagctccgt cttcataaag 300
 atattagtga gtcattctt tttttacca cattaatttc tttcccaat ggcaa 355

<210> 8644
 <211> 402
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-B6

 <400> 8644

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 cctcgatcga gtgtccctgg catcttgag tctggggcgg tccccatgag cgcctcatct 180
 agctctaacc ttgactcccc agctccaaaa tcttcgggtc cgttagctgt tctcctgta 240
 agccaggctc cgccagcaac actgatcgcc actacaactg cagcagcaat aatgcctaga 300
 gctgtccctc aagctaggat ttgcttcct tgctcgattc ttggagaaaa agaaggaaag 360
 ggtgacaact gccccgcctt acccatcagc ccaagacca ct 402

<210> 8645
 <211> 299
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-033-Q1-E1-B7

 <400> 8645

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gatgctgctg ctccaatgg tctttttgga cttggaatac atgaggtttc agttccaagg 120
gtctggagct cataaagggt tgacatctaa ggggggtggc tatgtgcttt ggtcgtgatg 180
gtattggggc aatcagcttt ggagaccaat atatctcaca ccactaatac acacctcttg 240
acatcaactg acaacatccc acatacgcca tcactatatg cgggattact gttggaaat 299

<210> 8646

<211> 318

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-B8

<400> 8646

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tggttatgcc caagataatc aggtcgaacc atgtctccat ttatttgac tgatgaggca 120
gtctgtgtgc aagccaaatg acaccacatt tggagggatc ttgattgtct gcacaaatca 180
tccattcctt gtccttgga aaattttgca accccaacaa ttaaaaatgg gttttggttc 240
caacttcaat ttttcaattc cattgacacc attttatcca aattccgga caatgtgtaa 300
acccaactg tttttttt 318

<210> 8647

<211> 328

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-C1

<400> 8647

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ctcacaactc cgtttccatc gacctggaca ataagggtgac tgcgtgtgcg gattctctga 120
ggaacaattg cttccggggg atgacatgcc ggggcgagga tccgcctcca catatccagg 180
agcaattact gagatcagtt ggcgtggaag acccaaaggt gaagacgac tgcagagatt 240
ttacacgtgg gaagtgttca cgatcagcaa atgactgccg attcttgac cattcatctg 300
ttgaagatgt tgcaattgtt tttcaaga 328

<210> 8648
<211> 201
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-C11

<400> 8648

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ttcgggctta ggaccttata catgaattta tattggcagg tacattttgt ctaaggatct 180
acacgcagga ggatggctct c 201

<210> 8649
<211> 370
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-C7

<400> 8649

cccacgcac caaggacg cg tgggcaacg tggcactgct cattaagatg aacatgatgt 60
gcatagttgc atactttgat catggaacga tggctgaaga aaccaccttg ctggcaaatg 120
cgtggggaag aaatgaagga accaatggca tggaggatgg aagaaagctg atggacaata 180
gtattggttc aaaccgtgag tattcaatcg atgatatgtc tcatccaaag gcaccacata 240
ctgagctcaa gcaaccctca tacttagctc ctggttgctc aagcaaccct ctcaagcaac 300
cctcaaactt agctcttttt tgcattcccc aaagttcaag catacatata tagccttcca 360
ctcatcatat 370

<210> 8650
<211> 331
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-E1

<400> 8650

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 ggaggtcaaa gacatgttta tcttgcatat agggaggggtg tcaaatactt ccggcctgaa 180
 atcaaactctg caactggaga agctctccgc acctttgtgt atcatgaaat tttgattggg 240
 tatctggact actgcaagaa acgaggggtt gtaagctgtt caatatgggc ttgcccattct 300
 acgaaacgag atgattatct tttatatattgc c 331

<210> 8651
 <211> 298
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-G1

<400> 8651

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 catacaggcc catcactcta cctcctggac ctgggtgcttt gaatgggtcca agtgcgcagg 120
 catcggcaag atcaaggctc tattctggag atgcgggtgc ggctgtctcc cgatcatcag 180
 ataagaaggg atcgtcttac aagtattctt tgtccagtat gtcaacttat gatcgtaaat 240
 gaggatttgt tttatctgcc aatggacgaa cctagtgaac cttgaaagtt tgggtttc 298

<210> 8652
 <211> 156
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-G3

<400> 8652

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 cagggcatcg acggcgagtg gagcgacaag agcgggggtca tcgtgtaccg ctggaacgac 120
 gaggggagcc gggccaggac acgccgcgct aactgg 156

<210> 8653
 <211> 369
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB189-033-Q1-E1-H2

<400> 8653

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atattgggtta taaatttgca ggtgccagca aaaccaaatt ataacttggg tatgtacgag 120
gcggcacaca gaccantgaa caaagattcg gtgggggggta cattcattga tggaactgat 180
gcataccgag atgccagatt taaacttata ccaagcattg ttgacgggta ttggatgggt 240
aagcgtgctg tatgaacaaa agcttgcctt ctggggcaaag cactaacgtg caattatcct 300
cgccaggata attttcttga gatagatgtt gacatccgtt catcatccgt ttcccggagc 360
attattgggt 369

<210> 8654

<211> 336

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-033-Q1-E1-H3

<400> 8654

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ccctccggcc tcctcctccc tcctgcacc cgcacctgcg gagagcgccg caagctagct 120
ggggaggagc gagacagtag caggaggagg acgggaggga ggaagagatg gcgggctgtg 180
atggagccaa gtcgctggcg tccatggagg aagaggcatg cgcgggagaac aagtacggag 240
ggatggcacc caagaagccc ttgatatcca aggaccacga gcgcgcctac ttcgattctg 300
cggactgggt gctgggcatt ttttttctct aacagc 336

<210> 8655

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-A11

<400> 8655

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atccctctc caccaccgct tcctccgct caccctctc gtcgtcgct cagaggcga 120
ccagcggcgg accctcgggg gcgcaaccat ggggctcttc actgtgacgg ggaaggccac 180

cacgccccttc gacggccaga agcccggcac ctccggcctc cgcaagaagg ttactgtatt 240
ccagcatccc cattatctgc agaactttgt ccaatcaaca ttcaatgccc ttctgtgga 300
tcaagtaaga ggtgcaacaa ttgttgctc tggtgatttt ttctatttct caaaagatgc 360
tggtcagatc ataacaaaaa tggctgctgc caatggagta acacgtgttt gggttggaca 420
aaacaatct 429

<210> 8656

<211> 438

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-A12

<400> 8656

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catgaggggtg ttgctcgttg ccctcgtctt cctggctctc gctgcgagcg ccacctccac 120
gcatggaggc ggcagctgcg gctgccagcc accgccgggg gtcatctac cgccgccggt 180
gcatctgcca cctccggttc acctgccacc tcctgtgcat ctcccaccgc cgggccacct 240
gccgccgcg gtccacctgc caccgccggt ccatgtgccg ccgccggttc atctgccgcc 300
gccaccatgc cactacccta ctatTTTTT tggcctcag cctcatcccc agccacaccc 360
atgccgtgc caacagccgc atccaagccc gtgccagctg caaggaaccc tcggcggttg 420
cagcaccocg atcctggg 438

<210> 8657

<211> 448

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-B10

<400> 8657

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acggcctcgc ttgtcgtcgg agagctgctc ttctcagat ccgagaaccc gagggcggag 180
ccgtccacc ttatatcaa ctccccggg ggtgtcgtca ccgcggggct cgccatctac 240

gacaccatgc agtacatccg ctgccccgtc accacgctct gcatcggcca ggcggcctcc 300
atgggctcgc tctcctcgc ggctggggcg ccgggtgaga ttttttttct gccaacgcc 360
agggtcatga tccaccagcc ctcgggcggc gctcaggggc aggccactga catcgccatc 420
catgccaagg agattctcaa gctgcgcg 448

<210> 8658

<211> 449

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-B12

<400> 8658

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atcaatcaga ttaaaagtct aggagcaaag gcaggagttg ttttgaatcc agcgactcca 120
ctcactgcaa ttgattaggg gcttgatggt gttgacctgg tgctgattag gggggtgaat 180
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aggttatgtg cagagaaggg agtgaacccc tggattgagg ttgatggtgg tgttgggtccg 300
aaaaatgcct acaaggttat tgaagctggc gcaaattcta tttctcagg ttctgcagtt 360
tttggggctc cagactacgc tgaagctatc aaatggaata agaccatcca aagacctcta 420
gctgtagccg cataaacaac ttgacgtgt 449

<210> 8659

<211> 396

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-C10

<400> 8659

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aatgagagga tgttcaagt gcaaggtgcc aaatgaagg agtagccctc aagtctcatc 180
agaagttgcc tgtgatgaaa atgctatact gaaggttatg gaattccttg cgttgccaag 240
ggcggacgcc atccaactcc tcatgcagta caatggaaat gcagaagcag tcatccaaca 300

gatcttccaa tagtgcttac tgtatttttt ttactagtct gcttgctttc aaacgtaatt 360
atttgttgat acttttcttg cctgtacag aacatt 396

<210> 8660
<211> 429
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-C11

<400> 8660

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agcaggggga agaagtctgt cagcgacggt gttttcgggg cgagagctcaa tgagatgctg 180
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acggagatca tcatccgcgc cacgcgcacg cagaacgtgc tcggcgagaa gggccgtacg 300
atcagggagc tcacctccgt cgtctttttt tatgttcaac ttccctgaga atggcggttg 360
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ccgttataa 429

<210> 8661
<211> 395
<212> DNA
<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-D11

<400> 8661

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ggtgcggcgc gtgtggtacc aggcggagaa caagggcggg gtgaggacgg aggacggccg 180
gtgggtgctg ccgcgcggc agagggtgct cgacgaccac ccggaggaca ctgaccatca 240
cctccagcgg ctcggtctca ccgcgtgaag ctcagcaata ctctgatagt agcgtaact 300
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cagctcagtg gcgccttcat gccgtgcatg atgcc 395

<210> 8662
 <211> 400
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-034-Q1-E1-F11

 <400> 8662

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acgaggtcct caagctcggg gtggagatga agacgcgcgt cgtcacgcga gggggccccc  180
gcaccgcctg atccgtcctg ccgccgacgc gtcacgtcac gcgttgtttg catggatgat  240
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gttcgtgcct ccaccttagc ctagggtttg gtttcttttt ttgtactgag tgtgtcatag  360
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<210> 8663
 <211> 411
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB189-034-Q1-E1-G11

 <400> 8663

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gtgctatagg cttgggtgga ggcacgggct gcttgacgag gtttacaggg gcgcgcgatg  180
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gagatgaagc gtacaacgat aatggtctgg ttccacgtac aatccgcttg ctcaaggaca  300
agttccctga tattgttatc tacacagacg tctctttttt ttcttagtca tctgatggtc  360
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<210> 8664
 <211> 376
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-G4

<400> 8664

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agggggtgtga aggttacttg gtcgatgggg gatggacggc tttaaatggg ttcgcctgtt 180
cgttggttaag catcatcggg ggaagtgtag tagtgctctt gctctgggtt gttgtctgag 240
gctgttggag tctagataag tataacagtg ttcacactat catgcccgtc ctgttattta 300
gtgaacctta atttgtctat atgttgctac tcttgttatt tattgaacct tactttattc 360
tagttgcatt ggaaaa 376

<210> 8665

<211> 424

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-H11

<400> 8665

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agcacgcagc cccaacaca cgctcttct cttcatcgt ctggccacag ggcatgcctg 120
caggcatgcc tgcgacgtcg atgagctatt ggcaggggct tacgagttag gactcttcat 180
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atgcttgata aaatagtga accctaaacc ccaaaaaacc ctaaaccctt attgtctgtt 360
tttgagctaa tgtcacacat ttgtacaag aaattctgta aataaaattg cgaaatatgg 420
caac 424

<210> 8666

<211> 385

<212> DNA

<213> Zea mays

<223> Clone ID: LIB189-034-Q1-E1-H9

<400> 8666

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 cacgtgcctg aagaagaaca tcgctatggg ctacgtgaag tcgggaatgc acaaggctgg 120
 gacggagttg aagggtgggg gtcgcgggaa gtcctacgac gccgtggtca gggggatgcc 180
 gttcgtgccc accaagtact acaagccctc gtacattata ttcttgtaga gagggacgcc 240
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 taactttctgt gagattgtct tacggttcac atttcatttt tttctgccta ataagccttc 360
 ttttcccaaa taaaaagcat gcatg 385

<210> 8667
 <211> 398
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-012-Q1-K1-B7
 <400> 8667

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 ccaagttttt gaaacctgct gttgctggct tcctcatgca gaaagaactt gactaccttt 180
 gttggagctg ttgccaaacc aaagaagcca tttgccgcta ttggttggtg atccaaggtc 240
 tcaagtaaga ttggtgtcat tgagtcgttg ctggcaaagg tcgatatact catccttggt 300
 ggtggtatga tctacacatt ttacaaggca caaggatatt ctggttgaaa atctctcgtg 360
 gaagaggata aacttgagct cgcaacttct cttattga 398

<210> 8668
 <211> 428
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-041-Q1-K1-D2
 <400> 8668

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 gggatgatct acacatttta caaggcacag ggatattctg ttggaaaatc tctcgtggaa 120
 gaggataaac tcgagctcgc aacttctctt attgagaagg cgaaggcaaa gggggtttct 180

cttttgcttc ccactgatat ttagtagcg gacaagtttg cagccgatgc tgagagcaag 240
attgtccctg ccactgctat ccctgatgac tggatgggtc ttgatgttgg ccctgatgcc 300
acaaaaacat tcgacgaagc attggacacc accaagactg ttatttggaa cggcccatg 360
ggagtgtttg agttccagaa gtttgcagct ggcaccgagg cgattgcaa gaagctagct 420
gagcttac 428

<210> 8669
<211> 377
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB3059-022-Q1-K1-C10

<400> 8669
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gcaaagggggg tttctctttt gttccact gatattgtag tagcggacaa gtttgcagct 120
gatgctgaga gcaagattgt ccctgccact gctatccctg atgactggat gggctctgat 180
gttgccctg atgccaccaa aacattcaac gaagcattgg acaccaccaa gactgttatt 240
tggaacggcc ccatgggagt gtttgagtgc gagaagtttg cagctggcac tgangcgatt 300
gccaagaagc tagctgagct tacaaccacg aanggtgtca ctaccatcat ncgcggcggc 360
gattctgtcg ctgctgt 377

<210> 8670
<211> 414
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3059-027-Q1-K1-C7

<400> 8670
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atgcacaggg ggcttctctt ttgcttccca ctgatattgt agtagcggac aagtttgcag 120
ctgatgctga gagcaagatt gtcctgcca ctgctatccc tgatgactgg atgggtctcg 180
atgttggccc tgattccacc aaaacattca acgaatcatt ggacaccacc aagactgtta 240

tttggaaacgg ccccatggga gtgtttgagt tgcagaagtt tgcaactggc actgaggcga 300
 ttgccaagaa gctagctgag cttacaacca cgaaggggtgt cactaccatc atcggctgcc 360
 acgactctgt tgctgctgtc tagaaagcta ggctgtccga caagatgaac caca 414

<210> 8671

<211> 210

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-004-Q1-K1-C3

<400> 8671

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 aaactcatga tgtataatct tacagtgtac catctgctat ttcattgatct ttgctactaa 120
 aacaggatga tccatttcct caagttcttc aactggctgt attttaaaag tataaaagct 180
 ttgtggcttt cgcattgaaa gtgatgtgta 210

<210> 8672

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-047-Q1-K1-A8

<400> 8672

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 atctgaaggg gaagaaggtg ttcgtgcgcg ccgacctcaa cgtcccgctc gacgatgccc 180
 agaagatcac cgacgacacc cgcattccgcg cctccgtccc caccatcaag ttcctcctcg 240
 agaagggcgc caaggtcatc ctgcgcagcc acctgggtcg tccaaagggg gtcaccccaa 300
 agtacagctt gaagcctctt gttccacgct tgtctgagct ccttgagggt gaagtcgtga 360
 tggccaatga ttgcattggt gaggaagttg agaaattggc tgccgctttg ccggaaggtg 420
 gagtt 425

<210> 8673

<211> 390

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-029-Q1-K1-A12

<400> 8673

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ctgccactaa tgtcattttg ggtcttgcctc ttggatacaa tgacaatgct ggtgggtattg 180
ctgagaactg atgctgttga tgctgctggc aacaccactg ccgctattgg aaagggattt 240
gccattgggtt cagctgctct tgtgtctctg gcgctttttt ggtgcctttg tcagcagagc 300
tggagtcaag gttgtccatg tactcttccc caagggtttc attggtttga ttgttggagc 360
catgcttgcc tattggatct atggcatgac 390

<210> 8674

<211> 458

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-035-Q1-K1-G7

<400> 8674

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tcagtcatta tcccaatttt tgctattgag tttagtatct tccttagctt cagccttgct 120
gccatgtatg gtgttgctgt ggctgctctt ggaatgctga gtaccattgc cacaggcctt 180
gctattgatg cctatggccc tatcagtgat aatgctggag gcatagctga aatggctggg 240
atgagccata ggattcgtga gagaactgat gctctagatg ctgcaggaaa caccactgct 300
gcaattggaa aggggttttc tattggctct gcagccttgg tatcccttgc actcttcggg 360
gcctttgtaa gccgggctgc tatctccact gttgacgttc tgactcctaa agtattcatt 420
gggcttattg gtggtgctat gctcccatat tggttctc 458

<210> 8675

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-024-Q1-K1-G11

<400> 8675

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tgatcggttg gattctatctt ggggttgaga cctctctctg agtccttgct ggtgcccttg 120

tctctggtgt tcagattgcc atttctgcat ccaacactgg tggcgcttgg gacaacgcca 180

agaagtacat tgaggctgga gtttcagagc atgccaggac ccttggccca aaaggttctg 240

accctcaciaa ggcggctgtc attggtgaca ccattggaga tctctcaag gacacgtctg 300

gcccttcctt caacatcttc atcaagctta tggcggttga atcccttgct ttcgccccct 360

tcttcgcccgc ccatggtggc attctcttca aatggctcta agccagcga 409

<210> 8676

<211> 403

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-001-Q1-K2-E4

<400> 8676

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atgcggtacc caaaggtttt gcatccatt gctgattcta tcaatatcaa caaagagatt 120

tggaaaatgt attttgatga acttctacca agattggtga aagaaggaag tgatggtaat 180

gctggatcca gtgctctttg tgacacaacc tgcttgagg cactctccag aaggatccac 240

tatgggaagt atgtggcaga cgcctagttt caagagctcc ctgaagctta cacgccagcc 300

ataatagccc aagtctgctt ttgttccaac tattagtatt tctagtacta ctattttcat 360

ttatttttta atctaattcc aaagtctcag aaccaaattg ttt 403

<210> 8677

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-017-Q1-K1-C2

<400> 8677

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atagtcgact aataaaagaa aaggacagca attctctgat ggatagctg acattcaagg 120

ctgtggaaga gaaggtcaag aagagagtag agaagaaggc taggacgttc gggcagaacg 180
 tcaccttgga tgacaatgcc actgctggtg acagcgagtg caaggtcgat cccaaagtgc 240
 tctccaagct gtatgatcag tgggtgatgc cactgaccaa ggatgtcgaa gtcgagtatc 300
 tcttgcgccg cctcgactga tcagtgatca cccgattagc tgtagctgct aactttatgt 360
 acgcgtgggt atcagattgc tttgcacatg ctctttatgg cttta 405

<210> 8678

<211> 441

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-011-Q1-K1-F5

<400> 8678

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 ccatggcatc gatgttttcg atcccaagtt caacattgtc tcccctggag cagacatgag 120
 tgtttactac ccgtatacgg aaaccgacaa gagactcact gccttccatc ctgaaatcga 180
 ggagctcatc tacagcgacg tcgagaactc cgagcacaag ttcgtgctga aggacaagaa 240
 gaagccgac atctttctga tggcgctgtc cgaccgcgtg aagaacatga caggcctggg 300
 cgagatgtac ggcaagaacg cgcgcctgag ggagctggcg aacctcgtga tcgttgccgg 360
 tgaccacggc aaggagtcca aggacaggga ggagcaagcg gagttcaaga agatgtacag 420
 cctcatcgac gagtacaagt t 441

<210> 8679

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-010-Q1-K1-C9

<400> 8679

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 ttcaacattg tctcccctgg agcagacatg agtgtttact acccgatac ggaaaccgac 180
 aagagactca ctgccttcca tctgaaatc gaggagctca tctacagcga cgtcgagaac 240

tccgagcaca agttcgtgct gaaggacaag aagaagccga tcatcttctc gatggcgct 300
ctcgaccgcg tgaagaacat gacaggcctg gtcgagatgt acggcaagaa cgcgcgcctg 360
agggagctgg cgaacctcgt gatcggtgcc ggtgaccacg gcaaggagtc caaggacagg 420
g 421

<210> 8680
<211> 418
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3059-024-Q1-K1-H4
<400> 8680

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aggctgatga ccctgaccgg cgtgtacggg ttctggaagt acgtgagcaa cctggagagg 120
cgcgagaccc gccgctacat cgagatgttc tacgccctga agtaccgtag cctggcaagc 180
caggttccgc tgctcttcga ttagtacggg gaaagaagaa gaagaagaag cccaggccgg 240
agaaccatcg cctgcatttc gatctgtttc accgcaattc gcattgttag tcgtgtattg 300
gagttatgtg tacttggttt ccaagaactt tgggttccttc tcgttttttt tccttggttg 360
agcgtttttg ggcagcgctg gcctggttcc tagtatggtg ggaattggct gcaccttt 418

<210> 8681
<211> 383
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3059-048-Q1-K1-H5
<400> 8681

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tacgctgagg atgtttccag tgaaataatg aaagaaatgc aggccaagcc tgaccttata 120
attggcaact acagcgatgg caacctagtc gccactctgc tcgcgcacaa gttgggagtc 180
actcagtgtg ccatcgctca tgccttgagg aaaaccaaact accccaactc ggacatctac 240
ttggacaagt tcgacagcca gtaccacttc tcttgccagt tcacagctga ccttattgcc 300
atgaaccaca ccgatttcat catcaccagc acattccaag aaatcgcggg aagcaaggac 360

accgtggggc agtacgaggt cca

383

<210> 8682

<211> 420

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-024-Q1-K1-E5

<400> 8682

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gaagctctac tccgagaggc tgatgacctt gaccggcgtg tacgggttct ggaagtacgt 120

gagcaacctg gagaggcgcg agaccgcgcg ctacatcgag atgttctacg cctgaagta 180

cogtagcctg gcaagccagg ttccgctgtc cttcgattag tacggggaaa gaaggagaag 240

aagaagaaga agcccaggcc ggagaaccat cgcctgcatt tcgatctgtt tcaccgcaat 300

tgcattgtt agtcgtgtat tggagttatg tgtacttggt ttccaagaac tttggttcct 360

tgtttttttt tctttcttgt ttgagcgttt ttgggcagcg ctggcctggt tcctagtatg 420

<210> 8683

<211> 453

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-044-Q1-K1-E7

<400> 8683

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cctgtaccgc gttgtccacg gcattgatgt gttcgacccc aagttcaaca tcgtgtctcc 120

tggcgcggaac ctgtccatct acttcccgtt caccgagtcg cacaagaggc tgacctccct 180

tcacccggag attgaggagc tcctgtacag ccaaaccgag aacacggagc acaagttcgt 240

tctgaacgac aggaacaagc caatcatctt ctccatggct cgtctcgacc gtgtgaagaa 300

cttgactggg ctggtggagc tgtacggccg gaacaagcgg ctgcaggagc tgggtgaacct 360

cgtggtcgtc tgcggcgacc atggcaacce ttccaaggac aaggaggagc aggccgagtt 420

caagaagatg tttgacctca tcgagcagta caa 453

<210> 8684

<211> 403
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-018-Q1-K1-F11

 <400> 8684

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 gtacagccaa accgagaaca cggagcaciaa gttcgtttctg aacgacagga acaagccaat 120
 catcttctcc atggctcgtc tcgaccgtgt gaagaacttg actgggctgg tggagctgta 180
 cggccggaac aagcggctgc aggagctggt gaacctcgtg gtcgtctgct gcgaccatgg 240
 caacccttcc aaggacaagg tggagcaggc cgagttcaag aagatgtttg acctcatcga 300
 gcattacaac ctgaacgggc acattcgttg gatcttcgcc catatgaact cgcgtccgta 360
 acggcgagct gttccgttac atttgctaca ccaaggtctc tag 403

<210> 8685
 <211> 253
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-017-Q1-K1-G4

 <400> 8685

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 ttaccacagc gacaaggccg cggatatcct ggtcaacttc tttgacaaat gcaagggaga 180
 tccgagctac tgggacaaga tctcacatgg cggcctgcag agaatctatg agaagtacac 240
 ctggaatctc tac 253

<210> 8686
 <211> 240
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-029-Q1-K1-F1

 <400> 8686

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actgccttcc atcctgaaat cgaggagctc atctacagcg acgtcgagaa ctccgagcac 120
aagttcgtgc tgaaagacaa gaagaagccg atcatcttct cgatggggcg tcttgacccc 180
gtgaagaaca tgacaaggct gggcgagatg tacggcaaga acccgcgctt gaaggagctg 240

<210> 8687

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-042-Q1-K1-B5

<400> 8687

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caaattggag ggtgtagacg gtagtacggc atcaaaacaa ggacttcgat ttgttttcac 120
tgatggatct aggattatct tccggctttc gggaaccgga tctgctggag ctactatccg 180
cctctacata gaacaatttg aatctgatat ctccaagcat agtctcgatg ctcaaacagc 240
tttgaagcct ttaatagacc tggctttgtc tgtttcgaag ctcaaggact tcacaggaag 300
agagaaacct actgtcataa cataggccct gtttgtttcg gcttttggca gtttctggcc 360
acaaaaagct actgcgtact gtcaaacgct cagcttttca gccagcttct ataaaattcg 420
gttggggcaa aaa 433

<210> 8688

<211> 431

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-019-Q1-K1-H1

<400> 8688

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gggtcttgga aagtcacctt caaatgttga gcctcctgaa tttggtgctg cagctgatgg 180
agatgctgac cgcaacatga ttcttggtta aagattcttt gtgacaccgt cggactctgt 240
tgccattatc gcagccaatg ctgttcaatc aattccttac tttgcttctg gcctgaaagg 300
agttgccagg agcatgccaa catctgctgc ccttgatgtt gttgcaaaga atttgaacct 360

taagttcttt gaggtgccta ctggaatgaa gttttttggg aatttgatgg atgctggaat 420
gtgctcaatc t 431

<210> 8689

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-020-Q1-K1-B12

<400> 8689

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cttcgaccgc caccaagatg aacaaggaga ggctcatgaa gatggccggc gccgtccgca 180
ccggcggcaa gggcaccatg cgcaggaaga agaaggctgt acacaagacg gtcaccacgg 240
acgacaagag gctgcagggc actctcaaga gagtaggggt caacaccatc cctgcaatcg 300
aggaggtgaa catattcaag gacgatctcg tcatccagtt cttgaacccc aaagtgaag 360
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at 422

<210> 8690

<211> 379

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-049-Q1-K1-B3

<400> 8690

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gggaaaccta ataaagggt aatacagcag caatttatgc tagggaagtc tctgcattgc 180
ttaccatgtg tattggcaga aaacaggagg cacttacaaa ggggtgttaat ctctgcgatg 240
gctgcctctc aggtgtaa at tggcttccgt ttagcgtgc ttttgtccgt atatttagga 300
tgatttgact tgtgctactt ttgggcacct ttacattta cagatatgta ttattcagca 360
taaataaat atagtagtc 379

<210> 8691
 <211> 407
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-044-Q1-K1-F4

<400> 8691

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 gaacaccaaa acaagaaat gatgctggag atgatgataa tgatgatgat gatgatgaac 180
 ctctctttaa tgaagacgac gacgaggagt tagatgacct tgagcaaggg gaggatgaac 240
 ctaacacaca acatcttgta cttgcacaat ttgataaagt gtcaaggacc aagaatcggt 300
 ggaagtgcac cttgaaggat ggaatcatgc atttgaatgg cacggatgtc ctttttaaca 360
 aggcgacagg tgagtttgat ttttgatttt ttggatgaag atgagct 407

<210> 8692
 <211> 409
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-035-Q1-K1-H9

<400> 8692

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 ggccgtgaag atcctgacag gggcgtgcag cctcagccac tgactcagga ttttttgatg 180
 atgtcttctg ggaaacgcaa gagggatgag tctctggtc agctcccttc tggttctttt 240
 gtaccacaac aagatggaag tgctgatcag atagtagaat ttgttgatgc aaaggaaaat 300
 gcgaatcaac tttggagtgc catcggaat aagcttgaaa caccaacca gacaatcact 360
 ccagttattc cgcagcgtga tgggattcaa gataactaca atgatcaat 409

<210> 8693
 <211> 422
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3059-042-Q1-K1-E7

<400> 8693

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caagaaggcg tacgagctct ccgtcctctg cgacgccgag gtggcgctcg tcgtcttctc 180
cagccgcgga cgcctctacg agtacgcca caacagtgtg aaggctacga tcgagaggta 240
caagaaggca cagccggttg gctcttctc tggccccca ctcttagagc acaatgccca 300
gcaattctac cagcaagaat ccgcaaaact gcgcaaccag atccaaatgc tgcaaacac 360
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gg 422

<210> 8694
<211> 418
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-047-Q1-K1-D8

<400> 8694

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gatagtgaag ttagcgggtga tagagaagtt cagcggacaa tgttgaatt attgaatcaa 180
ctggatggat tcagcagcga tgagagaata aaggcatag ctgcaactaa ccgtgctgac 240
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ccatacgaag aagcatgagc tagaatcttg caaatccatt caaggaaaat ggatggaaat 360
cctgatgtcc accttgaaga attggctcgc tcaactgatg acttcaacgg agcacagc 418

<210> 8695
<211> 435
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-010-Q1-K1-H6

<400> 8695

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 cactcgagga aaatgaatgt gaatccagat gtcaactttg aagagttggc gcgttcaacc 120
 gatgatttca atggcgctca gctaaaggct gtttgcgtag aggctggcat gctcgctcta 180
 cgccgagatg ctacagaggt taccacgag gatttcaacg aggggatcat ccaagtgcag 240
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 gatcattcag ttgtttgtga cactgccatt gtctgggcag gctaacttac tatttgtact 360
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<210> 8696
 <211> 395
 <212> DNA
 <213> Zea mays
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 cggcgccgaa catggggagg ggccgggtcg agctcaagcg gatcgagaac aagatcaacc 180
 gccaggtcac cttcgccaag cgccgcaacg gcctgctcaa gaaggcgtac gagctctcgg 240
 tgctctgcca cgccgaggtc gcgctcatca tcttctccaa ccgcggcaag ctctacgagt 300
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<210> 8697
 <211> 410
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-053-Q1-K1-C9
 <400> 8697

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agccactttc aaacaagaaa gaaaatgatg aagttttcat taagctgggt tctgacaagg 180
 ataagaagaa ggaaaatgct gagcgtgatg agcgtgccaa gaagtcggtg agcatcaacg 240
 agttcctgaa acctgctgaa ggagaaaggt actacggcgg ccgtggccgt ggaagggggc 300
 gtgggggatcg tgggtggttt agaggcggat acggaggggg atacagtcgt ggcccagctg 360
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<210> 8698

<211> 398

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-033-Q1-K1-F8

<400> 8698

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 ccaaactgtc ctctgccaac ccacaggagg aaaggcaagg ctactgagg gctgctcttt 180
 ccgcaggaag ggagactaga gcggatgtgg tcttcaagtt ttgctctatg ccagatacta 240
 gcgtcatgaa ctgccttttag ctaagatttt ccataagttg ttctcgagca gctatgtgtt 300
 gcatgttggc tacttccaaa cttatatctg gtttggtttg gattgtgatg aactaatggc 360
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<210> 8699

<211> 432

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-041-Q1-K1-H6

<400> 8699

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 gttttcagcc actcccagac tggtgttgtg tgccctggct gccaaactgt cctctgccaa 180
 cccacaggag gaaaggcaag gctcactgag ggctgctctt tccgcaggaa gggagactag 240
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gctaagattt tccataagtt gttctcgagc agctatgtgt tgcattgttg ctacttccaa 360
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atgttgacga ta 432

<210> 8700
<211> 255
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-018-Q1-K1-H3

<400> 8700

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gacagacttt tgaaggaggg cacttacaaa ggaaagaagt ttaatgcaat ctgtcacttc 120
tttggctacc aagctagggg agcactgcct tccaagtttg actgcgatta tgcctatgtc 180
ttggggcatg tgtgctacca catcatagct gccggtttga acggttacat ggccacagtg 240
acaaatgtta agagt 255

<210> 8701
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-028-Q1-K1-D5

<400> 8701

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tcatgccttg gagaaaacca aataccccaa ctccgacata tacttggaca aattcgacag 120
ccagtaccac ttctcttgcc agttcacagc tgaccttatt gccatgaacc acaccgattt 180
catcatcacc agcacattcc aagaaatcgc gggaagcaag gacaccgtgg ggcagtacga 240
gtccacatc gcgttcaactc ttcttgggct ctaccgtgtc gtccatggca tcgatgtttt 300
cgatcccaag ttcaacattg tctcccctgg agcagacatg agtgtttact acccgatac 360
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cgtcgagaac tccgagcaca ag 442

<210> 8702
 <211> 441
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-015-Q1-K1-E7

 <400> 8702

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 catgaaccac accgatttca tcataccag cacattccaa gaaatcgcgga gaagcaagga 180
 caccgtgggg cagtacgagt cccacatcgc gttcactctt cctgggctct accgtgtcgt 240
 ccatggcatc gatgttttcg atcccaagtt caacattgtc tcccctggag cagacatgag 300
 tgtttactac ccgtatacgg aaaccgacaa gagactcact gccttccatc ctgaaatcga 360
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<210> 8703
 <211> 407
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB3059-056-Q1-K1-A5

 <400> 8703

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 cccccggcga ggacatcggc ggcggcgccg gcgaatatag gaggaacttc ggggccgtgg 180
 ccaaggtgtg gagctcgtgg gtggagtccg ccgcccgcgc gtccgggggtg aggttcagcg 240
 tctcggtgca cctggagccc aagaccgcgc tcgcctggc cgccgacgac ggccctcttct 300
 ccgcctagct agctagctag ctactagtgt cgcttagctg cttncaggcc cttcttctga 360
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<210> 8704
 <211> 395
 <212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3059-035-Q1-K1-D9

<400> 8704

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acgacacgac ggacgagcgc aagcggaagc ggatgctgtc caacagggag tcggcgcggc 180

ggtcgcgcgc gcggaagcag cagcggtgg aggagctgtt ggcggagggtg gcccgctgc 240

agggcgagaa cgcggcgacg caggccccga ccgcggcgct ggaacgcgac ctgngcaggg 300

tggacggcga caacgctgtg ctgcgcgccc gccacgccga gctgaccggc cgctgcagt 360

cactggggcg cgtcctcgaa gtgctccaga tggcc 395

<210> 8705

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-019-Q1-K1-B10

<400> 8705

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caaaggatcc tgaccactag acagtcagct cgggcgctac ttgtgataag tgattactct 180

tcacgtctcc gtgccctaag ctctctctgg cttgctcggc ccaaggaata gcaagaacat 240

gctatttgac tgcaatactt ttcacaattt ggttttcaat ggtcaggaga tttgacaagg 300

ctgcgacaga cttgattcgg acatatctgc acatactatg acccaaattg aaggggatgt 360

tcatgtagct taagctgctt agctttgtag ttaagtgttg ttgatgtatc attaccaact 420

gctgtaaaa 429

<210> 8706

<211> 373

<212> DNA

<213> Zea mays

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<400> 8706

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catcctcccc ccaccccacc cccacacaaa cagattcaat ccgacaagac aagcatccat 180
gtcgtcgtca cgccggagct cgagccccga cagcaacgac acgacggacg agcgcaagcg 240
gaagcggatg ctgtccaaca gggagtcggc gcggcggctg cgcgcgcgga agcagcagcg 300
gctggaggag ctggtggcgg aggtggcccc cctgcaggcg gagaacgcgg cgacgcaggc 360
ccgcaccgcg gcg 373

<210> 8707

<211> 414

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3059-023-Q1-K1-E11

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tggaactccca gccaaaggcaa tgctgcagaa actgcgaatg ttttaatacat attttgagga 120
gatctatgcg gcacagtcag aatgggtgat agcagatgac cagctaaagg ttgacattag 180
ggcagcggtg gaggagacag tgatgccagt ttacgcctct ttaattgcca agttaaaagtc 240
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catccagcac ttggtttgaa gaacaacaaa gtgataaatg atatgtatcc ttgtagcctg 360
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<210> 8708

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-024-Q1-K1-E10

<400> 8708

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cgatgtcgtc gtcggcgccc gcaccggccg ccatggccgt ggacgacgcg gaggacgacc 120
agctcgctc catgtccacg gaggagatca tcagggcctc cegtctcctc gacaacgaga 180
tccgcgtcca caaggatgag ctgcagcggg cgaacctgga gctggagtct atcaaggaga 240
agaccaagga gaaccaggag aagattaagc tcaacaagca gctgccgtac ctcgtcggca 300
acatcgtcga gatcttggaa atgaaccctg aagatgaggc tgaagaagat ggtgctaaca 360
tcgatct 367

<210> 8709

<211> 394

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3059-047-Q1-K1-C2

<400> 8709

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tgacgcagtt ggaacgaaga ggtatgatgc tcattcagga ggggagcgtg agattcaaag 180
aactatgttg gagctgctga atcagctaga tggttttgac tcacgtggag atgttaaagt 240
cattctagca acaaaccgca ttgaaagtct tgatccagcc ttgcttcggc caggccgtat 300
agaccggaag attgaatttc ctctaccaga tattaaaact agacgacgca tcttccagat 360
acacacatcg aaaatgacat tagctgatga tgtg 394

<210> 8710

<211> 424

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3059-027-Q1-K1-C2

<400> 8710

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cgtcgacagc tccaactccg gaacccttgt cgccggcgcc ggcgatgtcg tcatctaccg 120
ccccgcccc ggcggcgccg atggccgtgg acgatgcgga ggacgaccag ctgcctcca 180

tgtccacgga ggacgacatc cgggcctncc gccttctcga caacgagatc cgcgtcctca 240
aagacgagtt gcagcggacg aacctggaat tggagtccgt caaggagaag atcaaggaaa 300
accaggagaa aattaagctc aacaaacagc taccctaacc tcgtggcaat ttcgttgaga 360
tcttggaat gaatcctgag gatgaagcta aggaggatgg tgctaacatt gatttagatt 420
caca 424

<210> 8711
<211> 404
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-003-Q1-K1-C10

<400> 8711

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agaggtcatt gagcttccaa tcaaacatcc ggaactatct gagagccttg gaattgccca 120
accaaagggt gtcctccttt atggacctcc aggcacagga aagacattgc tggcacgtgc 180
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gccatgcac atgttcatgg aagaaagtga ctctatcgga tctgctagaa tggagtctgg 360
aactggcaac ggtgatagtg aagtgcacgc tacaatgctt gaac 404

<210> 8712
<211> 436
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-C8

<400> 8712

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agcagcagca gctgctggca gccagggtc tcaaccccat ggccatgatg atggcgcaga 180
acatgccggc catgggtgga ctctaccagt accagctgcc cagctaccgc accaaccctt 240
gtggcgtctc cgctgccatt ccgccctact actgattcat gatatttggg aaatctctc 300

tatccatctc tctctatcta tatatgtaat aatgcagtaa gacgacacac attatcatgt 360
 gtgggtatgac caataatata tgcattgtca taataaagtt ttgggttttaa tgaatcaaaa 420
 gctaacaaac ccaacc 436

<210> 8713
 <211> 387
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-C9

<400> 8713

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 gcggcactgt actgcaaacc caattcgggt catcattata caggaaggat agaacgaata 180
 catggaggca cgtccaggtc ccggcaacac aacgcagcag cgaccccaaa ggccaggtag 240
 agaaaatact acatggcata cctctgggtc caggctcctc cggtgttctc gtacttgtgc 300
 cggtccgtct tgtacatgtg agctatctcg gggaccaaag ggtcgtcggg gttcggatca 360
 gtcagcaagg aacagatgga cagcagc 387

<210> 8714
 <211> 360
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-D10

<400> 8714

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 aacctaaaat ccaatataac tctaaccact atcatcacc cataacaatt cttcctcaat 180
 ctactgtcc ttccatttca aactctcaac taaactcaa cttccttttt aaccacgac 240
 acctttacat tccacaacta cctcaacttc taatcgaaaa acatttcctt aaaattaaac 300
 caaaaattcc tcttctaacc caatccttaa accttttttt actatctata aatttcacat 360

<210> 8715

<211> 434
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-D12

<400> 8715

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ccgtgctcgc ggctgccagc gccagcgccg ggacctctct cgtgccgggg tgggccatcc 180
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cgtactgccg gtgcacggcg ctgagcatcc tcatggacgg cgcgatcccg ccgggcccgg 360
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gattcgccgc cacc 434

<210> 8716
<211> 355
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3059-058-Q1-K1-D3

<400> 8716

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gggaccttca tctaattctt catggagcgc ctttcttttc tctcttcaa agccgccgtc 180
gtcgcaaccg gcgncggcgg cgtcggtctt taatcaacca agtctccgtc catcacaccg 240
tgcactttgt actgctagct agtactatat aacatttgta atgtccagaa gcttaaatacc 300
tgtacgggca gcaacctggg taaatacatc ggcccatgct ttcgctcggt cctcg 355

<210> 8717
<211> 426
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3059-058-Q1-K1-D4

<400> 8717

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gcgagaggnt ctggtagggc tctacgagcg cacgctcaaa gagatcaagg ccgtnncga 180
agacgagggt taccgcaagg ccgttgaatc cttcaccggt caccgntcc agatctgcca 240
agaggaggaa gactggaagc gcatcgagga ccgaatcgga tgcgggcagg tcgaggagct 300
catcgaagag gccgaggacg agctcaagct catcgctaaa atgattgaat gggatccatg 360
gngtgttccc gatgactacg aatggtaagt gattgaagac gacaccccaa ttcctaagca 420
tgttcc 426

<210> 8718

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-D5

<400> 8718

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cctcaatgct cacaagctcc tatagcttcc cttcttcccc cataccttcc atcaattata 180
gcttcaatat gtgaaaaccc agctcttcaa ccatataggc ttcaacaagc aatcgagca 240
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tcattggtac aaaccatcag ggcacaacag ctgcagcaac tcgtgctacc tctgatcaac 360
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caactgtcta cactgaa 437

<210> 8719

<211> 422

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-D6

<400> 8719

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aagagggcgc caagatgctg gttcgtgctg caagtgctag aggaaattgg atcctcgggt 180
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tggtctggta cttgtgtgat gtaaaactct aaactcgtcg gttggcatgt tgcctggtag 360
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gt 422
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<210> 8720

<211> 334

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-D7

<400> 8720

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aataggtcgc caagatgctg gatcgtgctg caagtgctag aagaaattgg atcctcgatt 180
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<210> 8721

<211> 441

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3059-058-Q1-K1-D8

<400> 8721

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 tggatgccat tgacgagtat tctattggac agctgaagga gtttgagggc aagaagctcg 300
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<210> 8722
 <211> 433
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3059-058-Q1-K1-D9
 <400> 8722

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 acaactgtgt caaggcctgc tttgccggtc atgaccacaa gggtagggccac tctgtggact 180
 cacacggtgt gcaccaccgc acccttgagg ctgccttgga gtgtcctcct ggtaccagcg 240
 cttttggtca cgtcgaagtg tatectaaca ggctgctgct tgtaggtttt gacagaatgg 300
 ctgatacaga ggtccgtttt tgagccatta aacggcttta attcgtgccg acttctacta 360
 cttctataat gttnttgtct atatagatta cagctgcagc agtccaaacg ctggctttta 420
 tccgatgctt aca 433

<210> 8723
 <211> 413
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-058-Q1-K1-E10
 <400> 8723

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 cggagctgtg ccgtcttctc ctcgacgccg acccactgc cctctcccg ggcgtcatct 120

ccatctccgc ctccctacgg cgctcgcgcg ccaagggcca gctctcccag gccgcgtgcg 180
aggactcaat aaagcggata aggtgcgctc ccgccgtgca ggatctcagg gacgcggatc 240
ttgtgatcga ggccgtcgtg gagaacgaag ctgtcaagaa gaagctattc gtggagctgg 300
ataaggtcac gaagccctcg gccatcctcg cctccaacac gagctccatc tccataaccc 360
gcctggcttc agctacaaa cgccctctc aggtgatagg catgcacttc ttc 413

<210> 8724
<211> 424
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-E11

<400> 8724

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tggcgacagc gctgaaccgc gggctccgcc tcctcgccgc cggcgccgag gcgtccaagc 120
cagcttctcg tggattccat gccaccggcg tgaagagaat gggagggcat ggccatgatg 180
agccatacta catccatgcc aagcacatgt ataacttgca caggatgaag catcagggtt 240
tgaaggtgac actctccgtg ctgggagcgg ttggcatcgg tgttggagtc cctgtgtatg 300
cagtcattt ccagcagaag aagactgcct ctggtgaga tgatgcctct cgctgcctgc 360
atatggagac ttattttgag cgacattttt ttgaagttaa aagcttggac ttcattctat 420
cttg 424

<210> 8725
<211> 422
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3059-058-Q1-K1-C6

<400> 8725

gctctgggcc accaacgagg ttcgcgcaa gtccaagttc tggacttcc tgagaaagcg 60
tcaagaaggt gaagaagagc aatggccaga tgcttgccat caacgagatc tttgagcgca 120
acccgaccac catcaagaac tatggcatct ggctgcgcta ccagagcagg actggttacc 180
acaacatgta caaggagtac cgcgacacca ccctgaacgg cgcagtggag cagatgtaca 240

acgagatggc ctccccccac cgcgtgaggt ccccttgcac acagatcatc aagacagcga 300
 cggteccactt caagctgtgc aagagggaca acaccaagca gttccacaac tccgagatca 360
 agttcccgtt tgtgtaccgc aaggtcaggc cgnctaccag gaagctccgg accactttca 420
 ag 422

<210> 8726
 <211> 237
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-B12

<400> 8726

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 ctccgttgta tctcctctgt tggctgatta actgttatta caagaaattg ctggacttgt 120
 tttttccagt tgttttgaat catgtattat gggttgcattg gcaccatttc ttcgtgggat 180
 gtgaattgaa acagtccaaa tcaattgggtg tggcagatat ctggtttgcc cttctac 237

<210> 8727
 <211> 316
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-B2

<400> 8727

attatgcca agtgcttatg ctgccgatga tagagctcta gcgcatgtac ctttctggc 60
 atattttgct tattcgctaa ttgctgaata cttgacttat tctcggaat ggtctatatg 120
 cagtccatgg gacgatgcaa gcgatgtcag atgatcaacc tatatcagag ctcatgtcat 180
 gtgatcaagt caaaggaacc gttggcaact ttagcatcgt atagacgaag acatggaaag 240
 attttgtttg gcgttctgtt gaactatgaa tatgacatgg acggagaaga tgatgccatt 300
 gtccatagat ggctca 316

<210> 8728
 <211> 315
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-B4

<400> 8728

gatagcactg cgtcacagcg ctggtcttta taaccttgcg agtacatgct atatgaatgc 60
gacattgccg tgtctgcatt ctgatccaga gctgaagtca gcgctgctaa gctatctaca 120
tactgcaaga ggtaatggca ttgaccaagc ttgtcataat atgactgctg ctactggcaa 180
taactctgat gatcttcac aacgtgttca cgctgacgca cctctacaag tgctgctgac 240
actgcgtata ctatacctga aagttgcaca gcagattctt aatgtctaca tgcaccagga 300
tgcagactaa tgctg 315

<210> 8729

<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-B5

<400> 8729

gagaataaat ttttttccat cggaatgtct gaaactatgt tgggtgtatc ctagtggggg 60
gttgagcatt aatggctcat attttgtcag gtctatgtgt cgccgtgaaa cttttaatca 120
aatcagttca ctcttttgcc tctaaaaaaaa aactaaaaga acaaaaagac ctaaaaaaaa 180
aaaaaaaaaa aaaaatgcaa agcaagtact gctggtgaag acatgtttca ttggcaagca 240
acaattatgg gaccacctga cagtccttat gctggtggtg ttatcttagt gaacatgcca 300
ttgccgacag attacctgtt caaacctcca aaggtttctt tgaagacaaa ggtcttccat 360
cctaatatca acagcaatgg aagtatatgc cttgacattc ctgaagagca ttggagccct 420
gcttt 425

<210> 8730

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-B6

<400> 8730

cccaactcct gaccttactg gatacattac tgagggacag atatacattg ataggcaggt 60

ccataacaga cagatttatc cacctattaa tgtcctgcc a tctctttcac gattgatgaa 120
gagtgtatt ggtgagggca tgacacgtcg agaccattcg gatgtatcta atcagcttta 180
tgccaactat gctattggaa aggatgttca ggccatgaag gctgtcgttg gagaggaggc 240
actctcgtct gaggatctgc tttacttaga gttccttgac aagtttgaga ggaagtttgt 300
gacacaagga gcatatgaca cacggaacat cttccagtca ctcgatcttg catggacatt 360
gcttcggatc ttccctggcg aacttctcca ccgtattcca gcaaagacct t 411

<210> 8731
<211> 437
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-B7

<400> 8731

cttgcattta accaattggg cgtactgaac cccgctgctt atttgcagca gcaaatagga 60
ctaccattta gccagctagc tgcagcaaac cgtgctgcct tcttgacaca gcaacaggtg 120
ctgcctttct accaacagtt tgcggctaac ccagcatccc tctgacaact acaacaattg 180
ttgcccttag gccaaattgc tttgacagac ccagcggact gctaccaaca acacatcatt 240
ggtggtgccc tgtgttagag tgctaattag atgtaattga catagtaaag taggatggat 300
gatgcatgtg gacaaccaga aatacgaagt tacattcaca gaatctaaca tgcattggaca 360
ttgcttcgga tcttccctcg cgaacttctc caccgtattc cagcaaagac cttggaccag 420
tactatagca gagatgc 437

<210> 8732
<211> 427
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-B9

<400> 8732

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tccctgctta tgctccttgc tctttctgca tgtgttgcta acgcgacaat tttccctcaa 120
tgctcacaag ctccatagc ttcccttctt ccccatacc ttccatcaat gatagcttca 180

gtatgtgaaa acccagctct tcaaccctat aggctccaac aagcaatcgc agcaagcaac 240
 atacctttat cacccttggt tcaacaatcg ccagccctat ctttggtgca gtcattggta 300
 caaaccatca gggcacagca gctgcagcaa ctcgtgctac ctgtgatcaa ccaagtagct 360
 ctggcaaacc tttctcccta ctctcagcaa caacaatttc ttccattcaa ccaactgtct 420
 acattga 427

<210> 8733
 <211> 385
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-C10

<400> 8733
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 acttgccgat acgggtcttg attcatgtga ggaatgaggg gtgcagtttc actttcactt 120
 taactctgat aatgaccatg cataagcgca ttcgtgactt aatgacaaac taagtgtcaa 180
 aggacgagtc tttcaaatta tcgtgcgcac tacataatac acttcatgcc atatgttgat 240
 ctctatattg ctatactaata tatgatactg aatatgcttt agaaaaaaca taaaaaata 300
 caaacaataa aaacatatca aaaacaacaa ttcacaccaa ggctgaacca aactagatcg 360
 agtaaccctg aagggttgta gcttc 385

<210> 8734
 <211> 434
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3059-058-Q1-K1-C11

<400> 8734
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 ttgctggccc acaggcctac cttatgcact gtttgcccg agagagagga gtggagggtga 120
 ccgacgggtg catcgaggct ccaaattcaa tcgtgttccc ccaggctgag aacagaatgc 180
 acgctcagaa cgccatcatg cttcacgttc tcggtgctta accctcctat tgcacaccag 240

tgtttaactt ttcttgaatt tgcttaggga ttgaggcagt tttggcttta gggcatatgt 300
gagagcttaa ttcagcgaac tgttcagtaa cgtggtaact gttcttcagg gtgggagttt 360
gttgtactgg aaaagtttgg caacctgaat aaaaaataat cttttgtgct ggttttactg 420
agcagcangg aaaa 434

<210> 8735
<211> 430
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-C12

<400> 8735

cctggatttt tcttctgctt gtggatgcg tcaaagaagc attggcttgc aaataatggt 60
ctgggattgg ctttctgtat tcaggggatt gagatgctgt cattgggac acc atttaaaacc 120
ggagccattc tcttgggtgg actttttgtg tatgacattt tctgggtgtt cttcactcca 180
gttatggtca gtgtggctaa atcttttgat gctccgataa agcttctgtt tcctactgcg 240
gatgatgcaa ggccattctc catgcttggc cttggtgaca ttgtaatacc tggcattttt 300
gttgcacttg ccttgcgctt tgatgtctca agaggcatca agaagcggtta cttcaacagc 360
gcattttcgg gatacgccgt gggtatggcg gtgaccatca ttgtaatgaa ctggtttcaa 420
gctgcacagc 430

<210> 8736
<211> 439
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3059-058-Q1-K1-C2

<400> 8736

accatctgtc gactggtagc agagagaaga gatagaccga gagagggagg gagagagaga 60
acctgagact gagactgaag catccgcgct agctagcttg ggcagcaaca tcacgatgtc 120
gtccaactgc ggcgaggatg agaaggagct ggtgtgcgtg accggcgccg gcggcttcat 180
cggctcgtgg gtggtgaatg agctgctcca gcgggggttac cgcgtcaggg gaaccgcgag 240
ggaccctgcg gacagcaaga acgcgcacct gctggctctg gagggagcca aggagcgcct 300

caccctgtgc cgggccgacg tactagaccg cgcctacctg cgcgccgnct ttgccggctg 360
acacggcgtc ttccacgtcg ccaccccggt gtccaacgac ccggagcttg tccgggtggcg 420
gtggagggca cccagaacg 439

<210> 8737
<211> 408
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3059-058-Q1-K1-C4
<400> 8737

gtcaaatatg tgcttgttgt ctttggagga cttgttggat accctagcga tgatatcaat 60
aagttgcttt ggatggtagc aataggaggt ggtgtgttcc ctcacattaa ggagccagat 120
tatcttaggg acgggtcaata tcgcgttgat gctcaagcta ctccaactat gctgaattgc 180
ctcatgtaca agctttgtta ctacagggtt gtggagactg atggaaaagg ctttgacaga 240
gtaagaggat atgaaatagg aaagaagcat ttcaagctaa cacattttga ggaggtat 300
acaaccacc attggatggg ccgcataat aaactgaaac cccagaagaa caggggttcga 360
ggcaagctgg aagaagttga aggccagtgc ccaaaactag ttccacac 408

<210> 8738
<211> 436
<212> DNA
<213> Zea mays
<223> unsure at all n locations
<223> Clone ID: LIB3059-058-Q1-K1-C5
<400> 8738

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tataagggga ctctattgga tgtctgtatc caaggcactg agatgctgtc attagaatca 120
tttaaaacac caaccattct attgagtcga ctttttgtgt atgacatttt ctgcttgtag 180
ttcactccac ttatagacag tgtggctaaa tcatttgatg ctccgataaa gcttctgttt 240
cctactgcng atgatgcaag gccattctcc atgcttgacc ttggtgacat tggaaatcct 300
gacattttag ttgcacttgc cttgaactgt gatgtctcaa gaggcattaa catacgttac 360

ttcaacaacg cattttccga atacgccgaa gctatggcgg agaccatcat tgtaatgaac 420
 tggtttcaaa gctcac 436

<210> 8739
 <211> 381
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-058-Q1-K1-B1
 <400> 8739

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 atatttttgc tatttgctaa ttgctgaata cttgtcttat tttcggaat ggtctatatg 120
 cagtccatgg gaggatgcaa ccgttgtcag atgatcaacc tatatcagag ctgagggcag 180
 gtgatcaagt caaaggaacc gctggcaact ttagcatcgt atagacgaaa acatggaaag 240
 attttgtttg gcgtcctggt gaactatgaa gatgacatgg aaggagaaga tgatgccatt 300
 gtagagagat ggctcaaagt ggggcaagag gtgtaccctt caacataata atgacttcca 360
 tacctgtgta ccaaaccaaa t 381

<210> 8740
 <211> 410
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-057-Q1-K1-H2
 <400> 8740

cagcaagcaa catagaaagt ggaatccagt agcaacaaca gagcaacaat ggcgaccgag 60
 atattttccc tccttatgct ccttgctctt tctgcatgtg ttgctaacgc gacaattttc 120
 cctcaatgct cacaagctcc tatagcttcc cttcttcccc cataccttcc atcaatgata 180
 gcttcagtat gtgaaaaccc agctcttcag ccctataggc tccaacaagc aatcgagca 240
 agcaacatac ctttatcacc cttgttggtt caacaatcgc cagccctatc tttggtgcag 300
 tcattgggtac aaaccatcaa ggcacagcag ctgcagcaac tcgtgctacc tgtgatcaac 360
 caagtagctc tggcaaacct ttctccctac tctcagcaac aacaatttct 410

<210> 8741

<211> 367
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-057-Q1-K1-H5

 <400> 8741

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 ctcgctcggt gcctggctct gtcagctgcc agcgctctg caatgcagat gccctgcccc 120
 tgcgcggggc tgcagggtt gtacggcgct ggcgccggcc tgacgacgat gatggcgcc 180
 ggcggggtgt acccctacgc ggagtacctg aggcagccgc agtgcagccc gctggcgccg 240
 gcgccctact acgccgggtg tgggcagacg agcgccatgt accagccgct ccggcaacag 300
 tgctgccagc agcagatgag gatgatggac gtgcagtccg tcgcgagca gctgcagatg 360
 atgatgc 367

<210> 8742
 <211> 437
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-057-Q1-K1-H6

 <400> 8742

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 tggaagcaaa acaattaggc gaatggtcca agcgatatac acaccagttg ccagaagtt 120
 tccaggaatt ccctggagag gtcattggct tatcatttcc tccgcaaagc tcacgtcag 180
 ttgttgata cagtaccagg gctatgtgca acatcgattt cggattgcca gtcgttgagg 240
 atgttggtt gccaaatgga tcaggtggac cagcagagaa ggcagacgca taaaagagta 300
 aaaaaacaag gcagaagcgt aaggcccggtg atgaagagtc tacagaggag aaaaggaaca 360
 acttcaactt ctttgcgttt aaagaaccag tgctctttgg tgggcatcta caggacagtt 420
 caattttaat ggtagag 437

<210> 8743
 <211> 367
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-H7

<400> 8743

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tataccacag ttctccgac cagttacttc aatgggcttc gaacacctag ctgtgcaagc 120
ctacaggcta caacaagcgc ttgcggcgag cgtcttaca caaccaatta accaattgca 180
acaacaatcc ttggcacatc taaccataca aaccatcgca acacatcagc tacaacagtt 240
cctaccagca ctgagccaac tagatgtggt gaacctgtc gtctacttgc aacagcaggt 300
gcttgcattc aacccaattg ctctggcaga cgtagctgca taccaacgac tacaacaatt 360
gcaacag 367

<210> 8744

<211> 310

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-H8

<400> 8744

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ggccgtttgg caccgacggc ttcgactttt ttaccgcat ggtcttcgaa tcccgggtacc 120
agaaggtcgc cgagggcaga tcccgaactc cgcgcccat cctcgtgcag gcgctgcacc 180
tagtggccgg aggcttgctt ctattgctgt cgatgcacaa gggggcgggc gtgaacaagt 240
tcgccgagct gtgcatggcc gccggattcc tggtataaac ggtgggggaa ttatggcgaa 300
tgcggtgcat 310

<210> 8745

<211> 444

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-A1

<400> 8745

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tcaaagaagg ttgcacaaca gtctccaagg gccaggttg caatctttgt tgttcttgcc 120

atgacttttaa gaagaaagcc tgatgtactg gtaaattgtta tgccaaagat aatgggaaac 180
aataaatatc tgggacagga aaagcttccc atcattgtct gggttattgc tcaggcctct 240
caaggtgacc tagtgtctgg catgttttgc tgggctcatt ctctatttcc cacattatgt 300
gcgaagtcaa gtgggaatcc ccttgcaaga gatttggttt tgcagttgct tgaaagaatt 360
ttgtctgtca ccaaagctcg ttctatatta ttgaatgggtg ctgttagaaa gggagaacgc 420
ttagttcccc ctgtttcatt tgac 444

<210> 8746

<211> 411

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-A10

<400> 8746

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tctagggtgt tatataaagt caactaactg gacttcactg tacaacgttt taaatcgtaa 120
taacttgga ataccaact taaccaact gaatcacatt gcactatc cagctttcgt 180
catatggaat aataccgaac agatcggcat tgataaact tgcgcacact gaatcacgat 240
taatacgcac tgtgacgcgc cccattaagc gccattaatc tcgtcgttac tcgcagttac 300
accatactg taccctacac tctacagccc gctactttcg gttcctttcc ttactttctc 360
tacacttctg gccactttcc ccgtctatcc ctaaatagct gtatatcttt a 411

<210> 8747

<211> 303

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3059-058-Q1-K1-A2

<400> 8747

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gtcatagggc gtagcacaac agtctccaag ggcccacgtt gcaatcttag tggtccttgc 120
cctgactctg agaagaaagc ctgatgtact gattaatgtt actacctaga tactgangtc 180
acagtgatta tctgagacaa cacaatcttg ccatcatcgt ctgcgatact gctcaatcct 240

ctgacagtga cctaccgtct ggcatgctat gatgatctca ttctctatct cccacattat 300
gtt 303

<210> 8748
<211> 442
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-A5

<400> 8748

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cttcttgccc tttttgtgag cgcaacaaat gcgttcatta ttccacaatg ctcaattgct 120
cctagtgcc a ttattccaca gttcctccct ccagttactt caatgggctt cgaacacca 180
gctgtgcaag cctacaggct acaacaagcg cttgcggcga gcgtcttaca acaaccaatt 240
gccaattac aacaacaatc cttggcacat ctaaccatac aaaccatcg aacgcaacag 300
caacaacaat ttctaccagc actgagccaa ctagctgtgg tgaaccctgt cgcctacttg 360
caacagcagt tgcttgcatc caaccactt gctctggcaa acatagttgc ataccaacaa 420
caacaacaat tgcaacagtt tc 442

<210> 8749
<211> 440
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-A7

<400> 8749

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tatccctctt tgcgcttctt gccctttttg tgagcgcaac aaatgcgttc attattccac 120
aatgctcact tgctcctagt gccattatc cacagttcct cctccagtt acttcaatgg 180
gcttcgaaca cccagctgtg caagcctaca ggctacaaca agcgcttgcg gcgagcgtct 240
tacaacaacc aattgcccaa ttacaacaac aatccttggc acatctaacc atacaaacca 300
tcgcaacgca acagcaacaa caatttctac cagcactgag ccaactagct gtggtgaacc 360
ctgtcgcta cttgcaacag cagttgcttg catccaaccc acttgctctg gcaaacatag 420

ttgcatacca acaacaacaa

440

<210> 8750

<211> 394

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-058-Q1-K1-A8

<400> 8750

cattaacata gatgacaagc tagagcgatc gccagtgtgc tatkgtttac tggcagatgg 60
gtgagcctct gtgtgctcgt gctcgtgttg ggtagcactg cattagagct gttcattgaa 120
catacaacgc gaagttgatg gacaagatgt gcttctgcat attgacaaca tttttcgttc 180
tactgacgta aactatgaag tgtctgatgt tctcggacgt ctacaatctg ttgcgggata 240
ccagtcacac cttgcaactg atcttgtacg actgcaagag tgtattacta caaccataca 300
aaggatctat tacatatgtg cacgacattt actagcctga ctatgacttg tcggatcctg 360
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<210> 8751

<211> 384

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-H11

<400> 8751

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tgtgcggggc tgcagggcct gtacggcgct ggcgcgggcc tgacgacgat gatgggcgcc 180
ggcgggctgt acccctacgc ggagtacctg aggcagccgc agtgcagccc gctggcggcg 240
gcgccctact acgccgggtg tgggcagccg agcgccatgt tccagccgct ccggcaacag 300
tgctgccagc agcagatgag gatgatggac gtgcagtcgc tcgcgacgca gctgcagatg 360
atgatgcagc ttgagcgtgc cgct 384

<210> 8752

<211> 417

<212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-057-Q1-K1-F5

 <400> 8752

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 tcaaggatcat ttctgggcct ggtgagaagc caatgattgt tgtccagcac aagggtgagg 120
 agaagcagtt tgcagctgaa gagatctcct ctatggttct tatcaagatg cgtgagattg 180
 ctgaagctta ccttggttagc acgatcaaga atgctgtggt cacagtcctt gcctacttca 240
 atgactcaca gaggcaggcc acaaatgatg ctggggatgat tgctggcctt aatgtgctgc 300
 gtatcatcaa cgagccaaca gctgcagcta tcgcctatgg tcttgacaag aaggctacca 360
 gtgtcgggtga gaagaatgtc ctcattcttg atcttggagg tggtagcttt gatgtct 417

<210> 8753
 <211> 403
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-057-Q1-K1-F7

 <400> 8753

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 gagaagtatt gccatcataa ttgcatatctt gcaacaaaca cttcaacaat agacctgaac 120
 ataattgggtc agaagacagc ttctgatgac cgcattgttg gtgcacactt ctttagtaca 180
 gctcatgtca tgtcactggt ggaaatagtt tgtactcatc atacttcctc tcaagatatt 240
 gtggacctga ttgatttggc aaataaaata cagaaaacac caatagttgt tggcaactgc 300
 acaggattcg ctgtcaaccg gatagtcttt ccttacgctc atgcagcttc tttacttgat 360
 gattatgggtc tggatgtgta tcacatagat catgtgatca cac 403

<210> 8754
 <211> 468
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB3059-057-Q1-K1-F8

<400> 8754

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gaaaagtgga aagtgcaggt tgatcgtgtt aaatatggtc gtggctgcgt cagttgtaca 120

acatcatagg ctttgtttta tctccattta tgatattgaa cttatataac atggcaggtc 180

cagattccag cagctctgag ctatagaaaa aacggcttgg gggcgagacg gagagagggg 240

tatttgcagt ataagtacct ttggatcgaa gagcatcact cgaagatgca tcgaggactg 300

ttcttcttct tctcaagct gtagcctgtg ggaggagagg ccggagaggc ctcccatgga 360

gttccccac tcatcacttc ttgttggccc cctgctagct gttcgttctt ctcagcaggt 420

agctagagat gatcttgctn taattctgtg ctgatctctt actcgtcg 468

<210> 8755

<211> 305

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-G1

<400> 8755

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ttcgccgata tcttcagcgg cgaacagcgc ccaccagatc ccgccctgc gatggagtcc 120

gtggtgaacc cgaaggcata cccgctggct gatgcgcagc tgacgatggg taccctcgat 180

atcatccagc aggccgcaa ctacaaacag cttagaagg gagcgaatga agcgacgaag 240

accctgaata ggggcatatc ggagtttgta gtgatggcgg cggacacaga gcctctcgag 300

atcct 305

<210> 8756

<211> 380

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-G10

<400> 8756

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caagaagctg attgcagaca ttgaagccca gccaaagcatt gcggttcaga aagtgctgaa 120

atccttcttg cacaagatct acaagaggca gaagtagggg ctcttggata aacgagctca 180
 ggagtcgtta ctcttgcga tgcttgacat aaccggactt cctcacctgg ttgctctagt 240
 atgatgtgga gcgtctagtt aaaaaaatc gatgtagtat gaagcacctt gctgctctga 300
 atattaacag gcaattaagg caaggtgctg tttcggtttg gtggaccgca tgttgcagat 360
 aataaattag ttgatttgtc 380

<210> 8757
 <211> 385
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-057-Q1-K1-G12
 <400> 8757

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 aaacctgaag ttgtatgtta tgagagtttt catctctgac gaatttgatg atcttcttcc 120
 caagtacctt agctttttga aggggtattgt tgactcggac acgctgcccc tgaacgtgtc 180
 acgagaaatg cttcaacaac atagcagtct caagaccatc aagaagaagc tgatccgcaa 240
 agcccttgac atgatcagga aacttgctga agaagaccct gatgagtaca gcaacaagga 300
 taagacagat gaagagaaaa gcgagatgga ggacaagaag ggcagttcgc caagttctgg 360
 atgagtttgg caaatcaatc aagct 385

<210> 8758
 <211> 433
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-057-Q1-K1-G2
 <400> 8758

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 cgtgtcgttc tcgtatctta tttttttct taattatatt ttatttttta tttttttgt 120
 ttaatttttt tttctttttt attttttttt atcttttttt taatttttta tttttttatt 180
 ttttcgtttt ttattattaa cttttttgta ttttttcatt ctattttatc tttattttat 240
 atagtttctt tttttcatat tttttgtctt tttttttaca ttttttttat tttaaatctt 300

tttattttttt tttcttttatt tcttttttttt tttttctcct ttttttattt tttttttttt 360
 ctttttttat ttttttcttt ttttttttatt aattttttta tttttatttt tttatttttt 420
 attttctttt tct 433

<210> 8759
 <211> 390
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3059-057-Q1-K1-G4
 <400> 8759

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 tcttcgtggg catcaacaag ggccatgtcg tcaccaagcg cgagctgcct ctgcgcccgt 120
 cccaccgcaa ggggaaagca acgaagaggg tgtccatggt caggggcctg atcagagagg 180
 ttgctggctt tgctccttat gagaagcgta tcaccgagct tctgaagggt ggcaaggaca 240
 agcgcgctct gaagcttgcc aagagaaagc ttggaactca caagagggca aagaagaaga 300
 gagaggagat gatgggcgtn ctcaggaaga tgagatcggc tggtagcac actgacaaga 360
 agaaataaag catttcaagt tcatgaatgt 390

<210> 8760
 <211> 429
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-057-Q1-K1-G5
 <400> 8760

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 tcttccgcgc agctagtgtc tacactcccg gcgacgatgg cggaggactt ggttttggac 180
 acggcgatcc gagactgggt cctgatcccg ctctccgtgg ttatggctct catcggcgtg 240
 ctccgctact ttgtctcaa gctcatgctc tccccggcga cctctgcgtc tcccgacccc 300
 aagctcggtt aggaagggca ggtggatcatc aaggcgagga acctgaggac caacgcacag 360
 gtcaccccg ccaaggcttt aaggcacgca agggttatta caccaacgag gaaaatggat 420

tacttcatg

429

<210> 8761

<211> 395

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-G7

<400> 8761

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ccatcatcaa gcagattccc cgtctccttg gtcctgggtct caacaaggca ggcaagttcc 120

cgaccctggt tactcaccag gaatccctcg aatccaaggt gaacgagact aaggcaaccg 180

tcaagttcca gctcaagaag gtcctttgca tgggcgtcgc cgtcggcaac ttggcgatgg 240

aggagaagca gatccagcag aacatccaga tgagcgtgaa cttecttgggt tcccttctga 300

agaagaactg gcagaatgtg aaatgcctct acgtcaaaag caccatgggg aaaccataca 360

gggtgttcta agtatgctct tttgtgaagt ctgct 395

<210> 8762

<211> 289

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-G8

<400> 8762

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gtcggcatca acacgggcca cgttgtcacc aagcgcgagc tgctctgcg cccgtcctac 120

cggatgggga acgcatctaa cagggcgtcc atgggtcatgg gcctcatcag agagggtgct 180

ggctttgctc ctcatgagaa gcgtatcacc gagcttctga aggggtggcaa ggacaagcgc 240

gctctgaagc ttgcccagaa aaagcttgga actcacaaga cgtgcctta 289

<210> 8763

<211> 338

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3059-057-Q1-K1-H1

<400> 8763

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gagggatttc ctttcgoggc gacatggaca ttgcactggc tcttcgcact atcgtcttcc 120
ccaccgcacg tcggtttgat accatgtact cgtacacaga cagtaagtcc cgacaggagt 180
gggtggctca cctccaggcc ggagctggca tagttgctga tagcaaaccg gatgacgagc 240
accaagagtg tataaacaag gctgcaggtg ttgctcgtgc cattgacctt gctgaatcta 300
catntctaga agactagtct agtctaata atgaaatg 338

<210> 8764

<211> 340

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-F4

<400> 8764

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atatcacaaa ctcgtattta ctgacgaaca aacgacacat cacacatcaa ggccaacagc 120
agcagatgat aaaccacggg aagcacagat aaaactaggg cagggaaggt ggtggaatag 180
ctcacatgcc acgccccatg gtctgctcca tgggcggcat catgacaaag acggagtgcc 240
cattgttgaa tccaggggtg ggaaccctgc ggcgcagctc gcgaccctcc tggcagaggg 300
cgcacgggtg gcagaggtag tgggttgcaa ggtcacaggc 340

<210> 8765

<211> 405

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-D9

<400> 8765

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tctgcagaag atggtttctt aaacgtgtgg gatcatgaga aggtggggaa gaagaaaaat 120
tctaattgcc cagccgggct tttctttcag cacgctggtc atagggataa gattgtagac 180

ttccactgga attcgtcaga tccttggaca attgtcagtg tctctgatga tggcgagagc 240
 actggtggag gtggaacact gcagatttgg cgcagtagtg atttgatcta ccgcccagag 300
 gatgaagttc ttgcagagct ggagaatatc aaggctcatt tggccagctg tgcaccgaat 360
 aattgagtca tgtgggttac ctgctgaatg caatcctgtg gaaac 405

<210> 8766
 <211> 374
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-E1

<400> 8766

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 ttcatctcat tctcagccg ctgaaagaac actgcccttc caagttaaag gtggtgagtg 120
 ggaaatcgac aaacgacttc tgaagatggg agggatgggt gcttctgggt cttgtgggga 180
 cttgtatcac gggacttacc ttggtgagga tgtagctgtt aaagttataa gagctgagca 240
 tttgaataag aatgtttgga acgagtttac gcaagaagta tatatactaa gagaagttca 300
 acataaaaat gttgtgcatc tcattggtgc atgcacaaaa ccacccatt ttgcataatt 360
 acaggatata tgtc 374

<210> 8767
 <211> 395
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-E12

<400> 8767

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 tgcccagatg tttggtgcaa aattcagcaa tagcagtaaa atatcaccag cacaacctac 180
 aactattctg ggtgatgaca ctgaaatttc ttcacctagt ggatcaaaca aatatgattc 240
 tcggttaaca attaaggggc aacctgatga ccaaggaaca gagcattctt cgtttctccg 300
 tgggtggggct catgttcttg gggctacagg tgcaatgggc attaaacttg gtgatcaaaa 360

tttccatggg accccagcat tgctgccagt tatgc 395

<210> 8768
<211> 304
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-E3

<400> 8768

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cgtggtccac aggctgccgg agcatacagc agttcatttt caattcttat tatcatatat 120
tatggaagaa gaaatgaaca tcttcaggat tgaacagtgt cgcgaaattg tagatgatgg 180
ttccacaatc ccaatgggac cgacagacaa agagacatgc tgcttcctgc tgtgagtttt 240
gtattgcaga cgacactggt tatgtggagt taaaaaaaaa tatatacgca aaaaagactt 300
ggaa 304

<210> 8769
<211> 236
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-E4

<400> 8769

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atctgtgcaa gcatataggc tacaacacgg acatgttgcg agcgtcgaat atcaaccaag 120
ttcctaattt caacagcgat ccttaggaca tctaacaata cagaccatgg tgacccgcag 180
cgacaacaat ttgtaccgcg ccgaccacct atataggggtg aactcctgcc gtctac 236

<210> 8770
<211> 403
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3059-057-Q1-K1-E6

<400> 8770

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atgggagact gtatcaaaca gtgatcttgt tttgctactg atatctgatt ctgctcaggc 120
 tgataactac gagaaaattt tctcgcacat gaaaccaaac agtattcttg gtttgtcaca 180
 tggattttctc cttggacatt tgcaatctct gggttttgat ttccctaata gcatcagtgt 240
 gattgctgta tgccccaagg gaatgggccc atcagtcaga agactttatg ttcagggcaa 300
 agagatcaat ggtgctggta tcaatgctaa gcttgcgtgt canccagatg ttgatggaag 360
 ggcaacagat gtagctctag ggtggtcagt aactttaggt tct 403

<210> 8771

<211> 436

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-E8

<400> 8771

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 aatgctcact tgctcctagt gccattatac cacagttcct ccgaccagtt acttcaatgg 180
 gcttcgaaca cctagctgtg caagcctaca ggctacaaca agcgcttgcg gcgagcgtct 240
 tacaacaacc aattaaccaa ttgcaacaac aatccttggc acatctaacc atacaaacca 300
 tcgcaacaca acagcaacaa cagttcctac cagcactgag ccaactagat gtgggtgaacc 360
 ctgtcgcta cttgcaacag caggtgcttg catccaaccc acttgctctg gcaaacgtag 420
 ctgcatacca acaaca 436

<210> 8772

<211> 402

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-E9

<400> 8772

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 cggcaggacg gcggacgaca tcgtcgactt catcaagaag agcaaggaga ccgcagccgc 180

cgccgccacc accacccagg tgccaccggc atccgagaag gcagccgccg ccgagcccgt 240
caaggacgag ctgtgagcat ccaaggtgtg gacggctgtg gctgcgtatg cgggaggaaa 300
acctggcgct aacgtgcctc caacgcctag tttttgcggg ggaccagagg gagagagaga 360
gagggacgga gttagagaga gaggggatct gcgacgtgtt tt 402

<210> 8773
<211> 307
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-F10

<400> 8773

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cattgagctc ttggatctaa cacgcgagcg aaccagagag ccatgaacct atcaagcaag 180
cgacatcctg gcctataaca gagacatatg ctaacacact catggagcag atgtgattct 240
cgcatgaagg aaggtgtgct tcatgatcat caaggcacta gaaccttaag ctttttttca 300
aagtgggt 307

<210> 8774
<211> 366
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-F11

<400> 8774

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ggtctaattc gggccacgga cgaccattc ctacacaacg ctttcagcac ctacggcgag 180
gtcctcgagt ccaagatcat acttgatcgg gagacgcata ggtcccgtg tttcagctcc 240
aacaacttgt acacggacga ggcgatgcag aacgccatcg agggcatgaa cggctaggag 300
ctggacagcc gtaacatcac cgttaacgag gaccagtccc gatacggtcg ttgacgccga 360
aaccgt 366

<210> 8775
 <211> 394
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-057-Q1-K1-F12

 <400> 8775

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 aaaccatcag ggcacaacag ctgcagcaac tcgtgctacc tctgatcaac caagtagctc 180
 tggcaaacct ttctccctac tctcagcaac aacaatttct tcattcaac caactgtcta 240
 cactgaaccc tgctgcttat ttgcagcaac aactattacc atttagccag ctagctactg 300
 cctactctca gcaacaacaa cttcttccat ttaaccaatt ggccgcactg aaccccgatg 360
 cttatttgca gcagcaaata ctactacat ttag 394

<210> 8776
 <211> 355
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-057-Q1-K1-D7

 <400> 8776

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 ttcgttaatg cttggcgtgt ggcttccacc agaactgcga aggcccaa at gatagttttg 180
 gatcttgatt ccttacgcat ttactgccag catatcataa tcttccttga gttattcttg 240
 atatgacaga cttttgagaa ttaagcatca agcatgtcac tcagttccaa attatagttc 300
 actttggtat tgtcctaggt caaacttttc tagctttgac ctatgctttc aaata 355

<210> 8777
 <211> 264
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-057-Q1-K1-F2

<400> 8777

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cattcattga attcaggacc cccgtgaatc tgatgaatca caatacaacc taaaatggca 180
ggacgtcgat tggaacccca ttattggtga aattgcttaa aggggtcctc gggggctctt 240
ggggtcacgt gattaccacc gaag 264

<210> 8778

<211> 398

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-B9

<400> 8778

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tgttgctgat attggaagcc tttcagatct tgtttctcag gttgaggttg taattagctt 180
gctgcctgct agttttcatg ctgccattgc acgagtatgc atagagttga agaagcacat 240
ggtaacggca agctatgttg atgaatccat gtcaaacttg agccaagctg ccaaagatgc 300
acgtgtaact atactttgtg aaatgggcct agatcctggc atagatcact tgatgtcaat 360
gaagatgatt gatgaagctc atgcacgaaa gggaaaaa 398

<210> 8779

<211> 329

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-C1

<400> 8779

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tgcttatgat cttgtcacga agagccaagg gcaggatgca ttaaggaaag cactgtggga 120
gactcttgaa agtggtgaga aagaattgga gagataccta gaaaacgtta cccaacatgc 180
accttatgcc acttgaaagg atcactaatt aacctcctag acttatctgc taaggatgaa 240

caagatactt tcttgttctt tcaagatgca ttcagaactt ctgtcaaatt gtacatttat 300
agagatgaaa ccgatgcttg tcaaagata 329

<210> 8780
<211> 373
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3059-057-Q1-K1-C11

<400> 8780

cccacgcgtc cgcccacgcg tccgctgacg cgtgggctgg cgaggggccc aatagtgtct 60
gcttggtggtg ttgctgctca cctctctgct ccttccttcc ttccctccct ccctccctcc 120
agagtccgga gcagagcagt caaccgggct gtcgtcgcca ttggtgcggt acgtgcgagc 180
ccgagcgggtg cgacgcaggg ggggaggggc cagtgagaga gacgacacgc gagagcgaag 240
ccaagcgaag gaggagcttc ctggcgcgcg cggatcgcgg aggctgtata tatatagtcg 300
gagggcgcgcg gctccggtcc ggtaacgtgc tgcangtggg gtgtggcgca tggcaggatt 360
aggcaaggca gcg 373

<210> 8781
<211> 357
<212> DNA
<213> Zea mays

<223> unsure at all n locations
<223> Clone ID: LIB3059-057-Q1-K1-C2

<400> 8781

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cgccgcggat gtggccaggg tgcccgttga cttcatcgag ctgctcggga tcaggcagag 120
cctctctccc tccaggaaca ggggcctgct caacatgctc agcctcatga agcgcaaggc 180
gcttgagatc gccggtggtg actcaacgtc aagtcagcaa tcagtccaag aggttaccag 240
accgctcta gtgaacggga aagagcctga atttgcagct ttcgaggtgc aaganaagga 300
aaaggaaagg ccacaggatg canagaggcg cgacgaggat gaacaattgg gtcaact 357

<210> 8782
 <211> 316
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-C5

<400> 8782

cagctaagcc cgggccagca gttcagatcc tgcggcgtag gcagcgtag cagcccgttc 60
 ctgagccagt gcgtcgagtt cctgaggcac cagtgcagcc cgacggcgac tccctaccgc 120
 tcgccacaat gccaggcgct tcaacaacat tgctgccacc agatcaggca ggtggagccg 180
 ttgcaccttt accagacgac atacgggtgtg gtcctgcagt acttcctgca acatgaaccg 240
 tacggcgagc tagcggcact gatggctgcc catgtagcgg caacagtgac tgctatgtgc 300
 agcctgcaaa tgcagc 316

<210> 8783
 <211> 399
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB3059-057-Q1-K1-C8

<400> 8783

ccacggtgga gaacgcgcgc gccttcgtgt cgggcctcgt gtcccacctc cgctccctgt 60
 ccggcacgcc gcgcgcgccc ggcaagtcgg tggagacgta catcttcgcc atgtacgacg 120
 aggacctcaa gcccggaag gcgtcggagc ggtacttcgg gctgttccag accagcctcg 180
 ccgagacgta cccgacgggg ttgctcagga acggcacggc cggaccgata ccagccacgg 240
 cgccggctcc ggcgccaacc acgtccgccg cgacgctgaa gccaacgcca gggcagcaga 300
 cacaggtgac tccagcgcag cagggctcga cggcngcagc tgggccttcg gcctctgcag 360
 gccgggccag ggcgggttac tcgagaggga ccaactaccg 399

<210> 8784
 <211> 203
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-C9

<400> 8784

gaacgtggac aacgcttgcg cctttttgtc aggcctcgag tactaggggc gctggctgtc 60
cggcacgccg cgcgcgctct gcaagtcggt ggagacgtac atcgacgcca tgtactaaga 120
ggacctcaag cccggcaagg cgtgagagca gtacttcagg ctgatccaga ccagcctaac 180
ctagacgtac tcgacggggg tgc 203

<210> 8785

<211> 436

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3059-057-Q1-K1-D1

<400> 8785

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aatgcgttca ttattccaca atgctcactt gctccaagtt ccattattac acagttcctc 120
ccaccagtta cttcaatggg cttcgaacac ccagctgtgc aagcctatag gctacaacaa 180
gcaattgcgg cgagcgtctt acaacaacca atttcccagt tgcaacaaca atccttggca 240
catctaacaa tacaaccat cgcaacgcaa cagcaacaac aattcctacc agcactgagc 300
cacctagcca tgggtgaacc tgccgnctac ttgcaacagc agttgcttgc atcaaacc 360
cttgctctgg caaacgtagt tgcaaaccag gcacaacaac agctgcaaca agttctgcc 420
acgtcagtc aactag 436

<210> 8786

<211> 309

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-D10

<400> 8786

tgcagctgca ccatcaactc gggcatatgg ctgcttcta ccccagcaa catcttccat 60
cccatctagt atcatcaatg aactctgctg ctcatgtaca gtagcaacaa ctactaccat 120
tcaggcagct agctgatgag agccctgctg cttcatgac acaacagcag tagctgcct 180
tctacctaca cgctatgcat agcgctttca ccctattacc actgcaacaa ttgctgccat 240

tcaaccaact tgctatgacg aaccagctg tgcactacca acaacccatc attgaggggtg 300
ccctctatt 309

<210> 8787
<211> 241
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-D11

<400> 8787

ggcatacact caatcctatt tgagattgca gaaccatcac ccacccacgc aacaggcaat 60
ccttaagcgt aaactgaaca accagaactg cataatgaga gacctaactc acatctaaat 120
catcatgatc aatgactact acctaattctg cacacttgctc atgccagcag tattaatgaa 180
tcgacctaag cactagttag acacaatttc attatagatc ccataactta catggaattt 240
c 241

<210> 8788
<211> 344
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-D2

<400> 8788

aagacaccgt cgctctctctc gcgtgcgagc gccgccactg catcttccca tcgatctggg 60
ccgaccccg c atcttcccat acgagctgtg tttctccaag ttcgctgctg gccatatcga 120
cgtcgtcatc ctgatccag acgagtgcgt gtgccatctc cacgggtctt cgacagattt 180
agcaagaatg tttggaagag gatctgctat gatgaacttg atccaagctg caactatgaa 240
aaaaatatcc ccagatcta ctactaacia gcgcacgaag agaacatcac caaaagttgg 300
tcgtcttaga gcaaactgga atagtggact agaaaagggg ttag 344

<210> 8789
<211> 390
<212> DNA
<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3059-057-Q1-K1-D3

<400> 8789

cttccccgcg tgccgcgtca aacaaatcta ggcttccaag cgagcgaaag ccttcctgcg 60
ccagccgata taccaacatc ctctccgccg attggaggca cctgcgaaga tgccgcagcg 120
gcactcaaag aacaacaacg acctcgctt cttcacgtac gaggagaagc ggaagctcgg 180
gtacggcacg cagcgggagc gcctggggaa ggactccatc aagcccttcg acgcctgctg 240
cctctgcctc aagccgctca tcgaccgct ctgctgcccc aagggccata ccttctgcaa 300
ggagtgcata cttgagtgcc tntctgcccc gaagaaggac atcaagcgta agctagcagc 360
tcacgaggcc cagaagaagc angagaagga 390

<210> 8790

<211> 372

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-D6

<400> 8790

gctgcattga actctgctgc ttatttgcaa caacaactac cattcagcca gctagctgct 60
gcctaccccc aacaatttct tcattcaac caactggcat cattgaactc tcctgcttat 120
ttacagcagc aacaactact accattcagc cagctagctg gtgtgagccc tgctgccttc 180
ttgacacaac aacagttatt gccgttctac ctgcacgctg cgcctaacgc tggcaccctc 240
ttacaactgc aacaattgct gccattcaac caacttgctt tgacaaaccc agcagcgctc 300
taccaacaac ccatcattgg tggcgccctc ttttagattt cttatgagtt atagttcaat 360
aataaagttt tt 372

<210> 8791

<211> 368

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-A3

<400> 8791

agggacaga actttatggc agccaacgag atcattgagc tcttctgcga gctgattgtt 60

acacgccttc ctatcatcgc aaaacagaag gaatgtccag cagacttgaa agaaggtatc 120
 tgcagtttga tatttgcagc tccaagggtgc tctgaactcc ctgaacttgg tcgcatacgt 180
 gacatttttg aaaagaagta tggcaaagat tttgtttctg ctgcagttga cttgcgcca 240
 gatgctgctg ttaacaacct tctgattgag aagctgtcga ttaagaagcc ttccgggcaa 300
 attaaactga aagttctgaa ggatatagca aaagagcatc agattgattg ggataccact 360
 gagagtga 368

<210> 8792
 <211> 388
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-A4

<400> 8792
 gtgaattcgg cccgaggttg aaggaccata tgcagtattg tgttaatcat ccagaggaaa 60
 ttaacaagct ctccaagggt aaagcccacc tatcggatgt caaagggatc atgatggaca 120
 acattgaaaa gatattggat cgcggggaga agattgagct tttggtgggt aagacagaga 180
 ccctacagtc acaggcggac agcttccaca ggcattggcag agagttgagg cgaaagatgt 240
 ggcttcagaa cctgaggttt aagctgatgg tgggtggcgg cattgcggct ctgaccta 300
 tcatttggct gatggtctgc aagggttca aatgttagag cacaccaagt tgctcgctt 360
 ttttttttct tttcaagcgt ttgatatg 388

<210> 8793
 <211> 344
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-A5

<400> 8793
 cggacgcgtg ggtgagccaa gagctactag gatctttcat gctgaacttc tggtttggg 60
 ttggccacat acatcatcca aaaaacttta ttattgaatt acaactaata agcaatctaa 120
 aagagggcac caccaatgat gtgttggttg taggaggccg ctggatctgt caaagcaagt 180
 tggacaaagg gcaacaattg ttgtagttgt aacagggttg cgggggttagc cgcaaactgc 240

tggtagaaag gccgcaactg ttgctgtgtc aagaaggaaa cacggtttgc tgcaactagc 300
 tggctaaatg gtagtagtat ttgctgctgc aaataaacag cggg 344

<210> 8794
 <211> 431
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-057-Q1-K1-A6
 <400> 8794

agcttccctt gttcccccat accttacatc aatgatagct tcagtatgtg aagaccagc 60
 tcttcagccc tataggctcc aacaagcaat cgcagcaagc aacatacctt taccacctt 120
 gttgatacaa caatcgccag ccctatcttt ggtgcagtca ttggtacaaa ccatcatggc 180
 acagcacctg cagcaactcg tgctacctgt gatcaaccaa gtagctctgg caaacctttc 240
 tccctactct cagcaacaac aatgtcttcc attcaaccaa ctgtctacac tgaaccctgc 300
 tgcttatttg cagcaacaac tattaccatt cagccagcta gctactgcct actctcagca 360
 acaacgactt cgtacattta accgaatggc cggactgaac cccgctgctt atttgcagca 420
 gcaaatacta c 431

<210> 8795
 <211> 323
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-057-Q1-K1-A7
 <400> 8795

ggacatagac agtgggaatcc aatatcatca atctatcaac caaggcgacc gatataggcc 60
 ttcttcttat gtccttggc atttctatgt gtattactct cgcgacaatg tatcttcaat 120
 gcgctcaagc tactatcact gtgctctgaa ctccatacac ttcatcactt acagcacctt 180
 tatgagaaaa cccatctctt aaacctata tgttctaaca atcacttgca ccagatgct 240
 tacgttaata accctcggat cgacaatctg cagccctata tttcgtgcag tcattgttac 300
 actccaagac tgcacagata tat 323

<210> 8796

<211> 306
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-057-Q1-K1-B1

 <400> 8796

 ttccgaggct acgacgtcac gcgacaagct ctaatctttt cgtttttgct actgttactg 60
 gttttaattg tcactcggag tctgggaact atttatatct tggttccttt ttagttgtca 120
 agtgcattgt tctgaacatc attggtcata ctgtactatc caattgctgt taaaacattt 180
 tttccaataa ttcgtatggg accatttggt aaaaaaaaaa acataaaaaa aaaaaaaga 240
 aaaaaaatt aataataata atataaaaat aataaaaata aacataataa aaattataaa 300
 gcataa 306

<210> 8797
 <211> 323
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-057-Q1-K1-B11

 <400> 8797

 agccttctat cagtaccatc aatcatcatt catcttagta gtataggggc caaatgaaat 60
 ctgcaacatc aattatctaa ctccaaaaac catgaagctg gtgcttgtgg ttcttgcttt 120
 cattgcttta gtatcaagtg tttcatgtac acagacagge ggctgcagct gtgggtcaaca 180
 acatagccat gagcagcaac atcatccaca acaacatcat ccacaaaaac aacaacatca 240
 accaccacca caacatcacc agcagcagca acaccaacaa caacaagttc acatgcaacc 300
 acaaacacat cagcaacgac aag 323

<210> 8798
 <211> 384
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-057-Q1-K1-B12

 <400> 8798

 gaaggatcca ggagacttga gtggattcta aagaagattg ctgggtggttc tgagcgcacc 60

ctccgtgcaa agctgacatt ttctcaggag tcacatggga atatcacaaa ggaagctggc 120
ccagtgaaca tgaatttcac tataccgatg tacaatgcat caaagttgca ggtcaggtat 180
cttcagatcg caaagaaatc gaaggcatac aacccttata gatgggtgcg atacgttaca 240
caagccaact cctacgtagc tcgtctatga ggaatcagca tctgtactct tgtttgcagt 300
ccatttttta tgggtgtaat atttgagcgt tatcatggac atagtggcgt gtattgtgta 360
actgtatatt gaggttcgca tacc 384

<210> 8799
<211> 229
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-B2

<400> 8799
aacaacagtt gttgccgttc tacctgcacg ctatgcctaa cgctggcacc ctcttacgac 60
tgcaacaatt gctgccattc aaccaacttg ctttgacaaa ctcaacagtg ttctaccaac 120
aaccatcat tgggtggtgcc ctctttttaga ttgcttatga gttatagttc aataatgaag 180
ttttttggat gatgtttgtg gcgtcccaga aataagaaag tacattttct 229

<210> 8800
<211> 302
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-B4

<400> 8800
ctttctgcaa gtgctgctac ggcgaccatt ttctcgcaat gtcacaagc tcctataggt 60
tccgtttctc ccccgtaact ctcaccagtg ttgtcttcag tatgtgaaaa cccaattctt 120
caaccctaca cgatccaaca tgcaattgca tcaggcatct tacctttatc acccttgttc 180
ctccaacaat catcagccct attacagcag ttacctttgg tgcatttatt ggcacaaaac 240
atcagggcac aacaactcgt gctagcaaac cttgctgect actctcagca acaacagtta 300
cc 302

<210> 8801

<211> 217
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-057-Q1-K1-B5

 <400> 8801

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 tgttactggg ttttaattgtc actcggagtc tgggaactat ttatatcttg tttcctttta 120
 gttgtcaagt gcatgtttct gaacatcatt ggtcatactg tactatccaa gtgctgggtga 180
 gacacttttt tctatcaatc gtgatgtaac agttgggt 217

<210> 8802
 <211> 386
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-057-Q1-K1-B6

 <400> 8802

 caatgatgac tggaagaaac gaaaggaagc acagagcctg aagaggctcg aggttaagaa 60
 gaagaggatt gagaggagga actctctcgc ctgcaacact tcaaaagaag ctgctgggca 120
 gagtccaaaa gagatgaatg caaacactga caaattagta agttctgatg aaactattgt 180
 cagcgctaac gaaagtcata gcagtggcaa gcatctgggtg aaggggcttc caccaaagta 240
 ccaggccaca attacatcag aagacagttc gtcagcaatg cgaaagaagc caaactcggc 300
 cttcaaagga acagccatca ctgaagagca gaactcatca tcgtctgttc cttccttcgg 360
 tgaagctata agtagcgtga cggcac 386

<210> 8803
 <211> 199
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-057-Q1-K1-B7

 <400> 8803

 gaataatcaa agtggcagcc taaacattgc tgagaggcca gaccacgtaa gggtaacgag 60
 aatacagtga aatgcctagc aatctgtagg gaaggataaa ctgaatgaac aagacaagga 120

cgacttacag gtggaccatc ccgtacttaa ccaggttaca cactttgagg ataggaaaact 180
gactaccatc aaagctgga 199

<210> 8804
<211> 384
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-G5

<400> 8804

gtcagcggtg aagggctccc acttcattga attgtgcgct cagcggcata tgccttggat 60
tttcttcaa aacattactg ggttcattgt cgatcaaag tctgaagcta gtggaattgc 120
caaagctgga gcaaagatgg tcatggcagt ttctgtgct aagggttcta aaattacaat 180
aattgttggg ggaagttttg gggctgggaa ttatggaatg tgcggacgtg catatagccc 240
aaacttttta tttctttggc caactgctag gatatctgct atgggtggca tccaggcagc 300
tgaggttctc gctcaaataa aatagaacaa cataaggaga caaggagtgg agtggagcaa 360
ggacgaggaa gaagccttca aagc 384

<210> 8805
<211> 393
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-G6

<400> 8805

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ctaccaagat attatccctc cttgcgcttc ttgcgctttt tgcgagcgca acaaattgct 120
ccattattcc acaatgctca cttgctccta gttccattat tccacagttc ctcccaccag 180
ttacttcaat ggccttcgaa caccagctg tgcaagccta taggctacaa caagcgattg 240
cggcgagcgt cttacaacaa ccaattgccc aattgcaaca acaatccttg gcacatctaa 300
caatacaaac catcgcaacg caacagcaac aacagttcct accagcactg agccacctag 360
ccatggtgaa ccctgtcgcc tacttgcaac agc 393

<210> 8806

<211> 423
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-G7

<400> 8806

cccacgcgctc cggttcttag atcgattgct cgccaggctg ttggcgagga gtcgtcgacc 60
ctcacggcag ccatgtctgt ggagctcatc ctgtggcttt tctccttcgt ctccgtcatg 120
gtcctcatcg gcctcaccgc ataccagctt atctgtctgt cagatttgga gtatgattat 180
atcaacccat atgattcatc gtctcgcatc aacgctgtgg tgctgataga atactcactc 240
caaggggccc tgtgtgcttc tttcctcttg acattgcatt ggttcccgtt tctagtcatg 300
acaccagtaa catactacca tgtcaaactg tatTTggctc ggaaacatct tgtagatgtc 360
actgaaatTT ttagacaatt aagtgcgag aagaagtaca ggatgatcaa gcttgccttc 420
tac 423

<210> 8807
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-G8

<400> 8807

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atcccaaagg gtacacaatt gtgccaacta ccatccaccc tggggaggaa gcaccttttg 120
ttttgtcagt tttttcaaaa gcatcaatca gactagaggc tgttttaattc aagattgaga 180
tcccatgtgt ttggtggtag ctgcgtctgc tgggcagggt ttcttctcac ccgtgcacgc 240
aggatccagc tgtgggttct cggaactag ataatgggta taggaattgc ctctggaca 300
acttcaatca atcttgctgc atgcaagtac ataagttcgg ttgcttggtg cagaactgac 360
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gtagc 425

<210> 8808
<211> 439
<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-G9

<400> 8808

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ccgccacgct gcggacatgc gaggctgagt cccagagggc tcatgcctgc gccacctccg 120

agcaggcggc ggccgacttc gctgcctcct agctcggagt cagggccagc aagctggtcg 180

cgctcgtcac caccgtccat ggtgggaagg acgccactag atacgtggtg gcgccaacg 240

gcatcacacg catgggcaag gcggcaggct ccagagccgt agtgccgtgc caccgatgc 300

cgtaccggtt catggtccac tactgccacc agccggcgga cgtggaggcg ctccgagctg 360

agctgaccgg gctcggagac tgcggcgtga caaccacgat cgccatgagc cagccaaca 420

ccatgaactg ggacgatcg 439

<210> 8809

<211> 423

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3059-056-Q1-K1-H1

<400> 8809

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ggtggtcttg gcggcggtag tggctacggg gctggtggcg gcgggggcct tgggtggtgga 120

agtggacatg gcatgggtgc cggattcggc aagggtggtg gtcttggcgg cggcgatggc 180

cttggcgggtg gaagtgggca tggcatgggt gccggattcg gcaagggtgg tgggtcttgg 240

ggcggcgggc gcggaggtgg tggcgggcgg gccgggtggg ttggcaaagg atttggcttt 300

gggtttggca aaggcagcgg gttcgggtgg ggtggcgggc gtgggggcgg cggcggcac 360

ggtgatcacc attgatacgt cagcatgcag catacgtctn ctatggttct atcacttact 420

ttt 423

<210> 8810

<211> 416

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-H10

<400> 8810

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accgtcactc ctatcacacc aggctccttt cgtgcatgcg caggcacaaa acatctacgc 120
acaacaacta caacaacttg ctctatgaaa ccttgctgtc tactctaagc agctgcactt 180
tcttgcatte aaccaacttg ctgcatagga ctctgctgct tacttgcaac aacaactacc 240
attcactcac atagctgctg cctaccggca ccaattcggt ccattcaacc aactgacacc 300
attgaactct gctgctcatt tacaacagca acagctacca ccattcacc agctagctga 360
tctgagccct gttgcctact tgacacagca acagttgatg ccgatctacc tgcacg 416

<210> 8811

<211> 433

<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3059-056-Q1-K1-H11

<400> 8811

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taaagttaac catactgctg tctaaaatag attcagtcag ttatcttgct agatgtttta 120
gaactttag atggcagaat ttaattatct attgaatact gaagttgtag agtattttgt 180
gtagatactc ctagagtatt tgtttgatat caccgctggt ttaattttta agatacaaaa 240
ttaacaaaca gcgttgctgc tgtatggcat gtggttcagg gtgggagtct ttccactggg 300
tcttggtttc aagtgttaga gtgttttggt gattgatggc aaatgtttgt gaaatatttg 360
tactaagttt tatgcccact agcangtggc tacactccag atcatgtcta gtacatttct 420
tctcttcgat gaa 433

<210> 8812

<211> 307

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-H2

<400> 8812

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gtggattcag caaacgggga tggggctcttg tcagaggtag tggctacagt gctagtagcc 120

gcacgcagca cttgggtggg gaagtggaca tggcatgcct gccggattct gcaaggatgc 180

ttgtcttggc ggatgctata gccttgggtg tgcaagtgga catcgcatgc gtgcctgatt 240

ctgcaagggt tgtgggtcttg acggctgcag acgatgacgt ggttgctgcc acagatgttg 300

acttgtc 307

<210> 8813

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-H5

<400> 8813

cccacgcgtc cgcccacgcg tccgtgtgat tgctcagcag tgcagtagtg atcttctgca 60

aggggagttg gagaggactc gattgaacat agcctgtttc atggagtcga cccttcaacc 120

aacagctgcg ccagcaggcc caaagcctgc cgcacattct tcttaccaag cacagcatgc 180

tcccgcccaa acgtcctcgc ctagtttttag aaggcagcag actggtacaa gttccccctgt 240

agtctccagg cggcgccggt gagcttagtg catcttccca tcattggcgt agcctcttcc 300

cggagtttcc ttccctttcc cccctcacat gtgtgctttt tttttaatct cttgtaattg 360

tcacctgtgt gtcagtgtgt acgaatttcg atccattctt ttgggtgtgtg ataagatgaa 420

a 421

<210> 8814

<211> 291

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-H6

<400> 8814

agaagacttt cttccagaaa cctgaatcag aggcatgagt ctccaggctg aaaaatgctg 60

caaactctga actttggtac accacttttg tccgggatga ttcttgatga taactcaaca 120

aataatatga gacccactcg tctttccttg attgatttta ttcagatgta cgcattcctc 180
 ttgcatgtaa tattcacgag gtgagtgtag atcatttgac ttgtttatca tcacacagag 240
 aaactgcttg cttcaaccgt gttatatggg catgatggca tctctaaaat a 291

<210> 8815

<211> 375

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-H8

<400> 8815

ccgagccggc cgtgtccgtg cagctcggcg accacggcca cctcgcctac tcccacgcca 60
 accaggcgct gctccgcccc aggtcgttcg cggccaagga cgaggtgttc tgccctgttcg 120
 aaggggtgct ggacaacctg ggtcgtctga gccagcagca cgggctgtca agcaagggcg 180
 ccaacgaggt gtcctcgtc atcgaggcct acaagacgct gcgcgaccgc gcgccctacc 240
 cggccagctt catgctcgcc cagctcacgg gtcctacgc cttcgtcctc ttcgacaagt 300
 ccaccaactg cctgctagtc gcatccgacc ccgagggcag ggtgccgctc ttctggggga 360
 tcaccggcga cggct 375

<210> 8816

<211> 436

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-H9

<400> 8816

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 cgccacgctc cggacatgcg aggetgagtc ccagaggct catgcctgcg ccacctccga 120
 gcaggcggcg gccgacttcg ctgcctcctc gtcgggggtc agggccagca agctggtcgc 180
 gtcgtcacc accgtccatg gggggaagga cgccactaga tacgtggtgg cgcccaacgg 240
 catcacacgc atcggcaagg cggcaggggc cgcggccgta gtgccgtgcc acccgatgcc 300
 gtacccgtac atggtccact actgccacca gccggcggac gtggaagcgc tccgtgttga 360
 gctgaccggg ctcgagacg gtggcgtgac aaccgcgac gccatgtgcc acgccaacac 420

catgaactgg gacgat

436

<210> 8817
<211> 359
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-A1

<400> 8817

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ttctggttgg ccacatacat catccaaaaa actttattat tgaattacaa ctaataagca 120
atctaaaaga gggcaccacc aatgatgtgt tgttggtagg aggccgctgg gtctgtcaaa 180
gcaagttgga caaagggcaa caattgttgt agttgtaaga gggttgcggg gttagccgca 240
aactgctggt agaaaggcag caactgttgc tgtgtcaaga aggaagcacg gtttgctgca 300
gctagctggc taaatggtag tagtatttgc tgctgcaa at aagcagcggg gttcagtgc 359

<210> 8818
<211> 332
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-057-Q1-K1-A10

<400> 8818

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attggttgac atgctagaga caactgtccc actggatgat gcacagcgag cactcataga 120
gagggaaatg tttggccgat aggcactcaa tgttattgca tgtgagggtc catacagagt 180
tgagagaccc gagtcatata aacagtggct ggtgatgaac ctgagggtg gatatgttca 240
agccccgttt aaccaagaag acgtgatgaa agcctatgac aaatttgaag acatttatca 300
cacggacttt gtcatatatg aagacagcgt at 332

<210> 8819
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-G4

<400> 8819

caggaaagtg ttcgtcctca tggcgcttcc gcagccgaag tagggcctct tcctgggcat 60
caacaagggc catgtcgtca ccaagcgoga gctgcctctg cgcccgctcc accgcaaggg 120
gaaagcaacg aagaggggtg acatggtcag gggcctgac agagaggttg ctggctttgc 180
tccttatgag aagcgtatca ccgagcttct gaaggttggc aaggacaagc gcgctctgaa 240
gcttgccaag agaaagcttg gaactcacat gagggcaaag aagaagagag aggagatgat 300
cggcgtcctc aggaagatga gatcggctgg tacgcacact gacaagaaga aataaagcat 360
ttcaagtaca tgaatgtggc aaccagagat tatcaactgt gttcttt 407

<210> 8820

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-F1

<400> 8820

ctagcaacat agaaagcaca atagtgtacc aacaatggca gccaaaatat tttgcctgct 60
tatgctcctt ggtctttctg caagtgtctg taccgcgacc attttcccg c aatgctcaca 120
agctcctata gcttcccttc ttccccgta cctctcacca gcggtgtctt cggtatgtga 180
aaacccaatt cttcaaccct ataggatcca acaggcaatc gcagctggca tcttaccttt 240
atcacccttg ttcttccaac aatcatcagc cctattacag cagttacctt tgggtgcat 300
attggcacia aacatcaggg cacaacaact acaacaactt gtgctagcaa accttgctgc 360
ctactctcag caacagcagt ttcttccatt caaccaacta gctgcattga actctgctgc 420
ttattttgc 428

<210> 8821

<211> 401

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-F11

<400> 8821

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ccaactactt gctcgagaca ctcgaggctg gaaagcggca gagcacggag gccctgctat 120
agcagctggt cctggaagtg cacgacgacg tgcgattgct ccacttcatg aaacgtcttg 180
atggacagaa tgtcgtgtac atcatgcggg acgcgatggc agtggatcgt ggatgcagga 240
cgtgcagatg atgatgctag gcacctgacg cgcagacatg gaacgaatgc tgcagcactc 300
agagcgtgag catactaaca cgtgccgctg atagatcggg ttctctgagc ctatggtgca 360
tcgtatcaca gcagccgcag acgtgctgat gataccaact g 401

<210> 8822

<211> 426

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-F12

<400> 8822

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cagacccttc aaaacaggag aagtttttgg catacatggc cccagcaccc catgagctcg 120
ccagagactt ggatgatgaa aacgatgata tccagtattc ctggctaata gaatatcact 180
gggaagtgag aggagatgat aaagatgac ctacaacata cttgtgcaca ttgataagg 240
aggaggggtgc aaaatatttg cctctcccta ctaagctagt ttgacagaag aagaacgcta 300
aagaggggag gtctggcgat gaaattgagc attttccagt accttccctt attactgtga 360
acaaaacagg tcatgtcggg accatggatc gcggagaatc ttctggcatg catgtgaatt 420
caaagc 426

<210> 8823

<211> 379

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-F2

<400> 8823

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cttctgggtg tgcgttgcat tcctttctgg tctgatgcat ctcattattc tccatcggtg 120
atgattggta atccgatatg ggggggtgcaa gtatagttac gttgtacagg aacgatgcat 180

tgcatgtgtac atattccaaa atgaaatcat tttacacact tcgaaggga tcgatgtctg 240
 aagctgggtt tctcgtgcaa tactttcaga gtcaacacta cactgccctg gttatccatt 300
 cagcatgtat ggtgggtgtcc aacaaagacc cattccttgt gaaaaaatct tagcactggc 360
 tccttcaata cgaaagaaa 379

<210> 8824
 <211> 403
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-056-Q1-K1-F3
 <400> 8824

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 ttttttctct ctcgtcgtcg agtcaaaaaa agaaaaaga aaagaaatgg tcaaacgcg 120
 cggacagtga gtttggacgt ctgtgtatct cggcgacctg tggttttttt ttctctggag 180
 ggcttttggg ccgcattgaa tttagccggg tttgtgactt gtgactttgt gactgagtag 240
 cggagtttag aagcggtaga agaataatggg tctagggata ggtgaagtca gaatcaggac 300
 aagggttttc gtttgttttc atccttcttt tttcagtttt ttaagatgat gcttttagtt 360
 ttgctaaaaa aaaaaaatta aataaataat aaccgatata act 403

<210> 8825
 <211> 370
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-056-Q1-K1-F4
 <400> 8825

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 agcgatggcg cgcggcgtgg tgcggcgaa gggcggcgcg gtcgcgggca agaagaagg 120
 gtcggtttcc ttcacgatcg actgcaccaa gccagtggag gacaagatca tggaagtgcg 180
 ctcgctcgag aagttcctgc aggagcgcat caaggtcgcc ggcggcaagg ctggcaacct 240
 cggcgactcc gtcaccatct ctcgcgagaa gaccaaggtc accgtcacct ctgacggacc 300
 cttcttcaag aagtacctga agtacttgac caagaagtac ttgaagaagc acaacgtgcg 360

ggattggcta

370

<210> 8826
<211> 425
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-F5

<400> 8826

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aaaggtttta ctgcagtgta agtcaactgt tggcgcacaa gcaacagcta aatcgaatgc 120
tgtcacttct cttcagatgg cacgatttag gctagtgtcg gacatgataa gactgctgta 180
ctttggagca tggaacattt tcagacacag tatacaccac aagagcatgc ccttattatc 240
actgatgtcc gtttcaggcc taactctagt cacttggcaa catgtacttt agatagaact 300
attaaattat ggattgctgc cgatcctgga ttctatgtgc atacatacac tgggcacaaac 360
ggacagatca catcattaga tagtcatcca aagcaaacag accttctatg ctcttgtgat 420
tgcag 425

<210> 8827
<211> 407
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-F6

<400> 8827

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ccacctccac gcatacaagc ggcggctgcg gctgccagcc accgccgcgc gttcatctac 120
cgccgcgggt gcatctgcca cctccggttc acctgccacc tacggtgcat ctcccaccgc 180
cggteccact gccgccgcgc gtccacctgc caccgccggt ccatgtgccg ccgccggttc 240
atctgccgcc gccaccatgc cactacccta ctcaaccgcc ccggcctcag cctcatcccc 300
agccacaccc atgcccgtgc caacagccgc atccaagccc gtgccagctg cagggaacct 360
gcggcgttgg cagcaccgcc atcctgggcc agtgcgctga gtttctg 407

<210> 8828

<211> 305
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-056-Q1-K1-F7

 <400> 8828

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 tacggaattg gcaaaagggg aaaccgttta tcctgttaat taatTTTTTT taataatata 180
 tgaacccatt ttaattattg tactaacatt aacagtaagg ttcttattaa atacttaata 240
 caagggggccc tgtctgcttc ttttctcttg acattggatt ggggtcccgtt tctagtcata 300
 acaac 305

<210> 8829
 <211> 406
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-056-Q1-K1-F8

 <400> 8829

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 tgaagtcat gaacgtggag aggtccttcg cgcagcagca ctacgtgac ctttccgaca 180
 agcctttctt ccccggttg gtggagtaca tcatttccgg ccccggttg gcgatggtgt 240
 gggaggggaa ggacgtcgtg ttgactggcc gcaggatcat tggggccacc aggccttggg 300
 aggcagcccc cgggtaccatt cgtggggact acgccgtgga agtcggcagg aatgtcatcc 360
 atggaagcga ctccgtggag aacgggaaga aggagatcgc tctctg 406

<210> 8830
 <211> 312
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-056-Q1-K1-G1

 <400> 8830

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attctagatg ttataccgca tgctttgttt cggtttctat gtcgataaat ggtggccgga 180
tgctgggtttt cgtgctccga gccggccacc aggaagaaga cctgcctgcc cttgtgggtg 240
cagcgttgtt agaatgacct acggtgtatt tgactttgac aggctgctg cctagtggac 300
tgatattctg tt 312

<210> 8831
<211> 432
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-G10

<400> 8831
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agcttccctt cttcccccat acctccatc aatgatagct tcagtatgtg aaaaccacagc 180
tcttcaacct tataggctcc aacaagcaat cgcagcaagc aacatacctt tatcaccctt 240
gtttcaacaa tcgccagccc tatctttggt gcagtcattg gtacaaacca tcagggcaca 300
gcagctgcag caactcgtgc tacctgtgat caaccaagta gctctggcaa acctttctcc 360
ctactctcag caacaacaat ttcttccatt caaccaactg tctacattga accgtgctgc 420
ttatttgcag ca 432

<210> 8832
<211> 419
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-G12

<400> 8832
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agacttcatt tcaggccggg atggacgact acgcccggga gatgatggag ctcaagacgc 120
tcgtcaccgc caccctcgag aagaagggcg tcctcgccaa gattagggct gagctaagag 180

caagcgtggt tgaagccatt gaagaggagg atcggctgga gaatgatgat ggaggggaacc 240
ctgcttttgc tggtagctgc aatgaccgag ctaagcaact gcatgcttca ccttcaggta 300
ggttactaac tgcacttgta tgcgaatact tggagtgggc gcaactaagt cacacactga 360
atgtttactt gccagagtgt aacctgcccc aggacttctg gaagaatgaa ctgaaagac 419

<210> 8833
<211> 356
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-G2

<400> 8833

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atggtgaccc tgcttatgct ccttgctatg cctacatgtg ttgctaacgc gacagttaac 120
cctacatgct cacatgctcg tatagctgcc cttattgctc cataccttcc atcaatcata 180
gcatcagtat gtgaaaaccc agctgttcaa ccatataggc tacaacatgc aatcgcagca 240
ggcaacatac cttgatcgac ctcgttgtgt caacaatcgc cagccctatc ttcggtgcaa 300
tcattggtac aaaccatgat ggcacaacag ctgcaacaac tcgtgctacc tgtgat 356

<210> 8834
<211> 424
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-G3

<400> 8834

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tatgtcaaag ttgaagataa cattaatctt gacttagctg ggtaattga gatgctcgaa 120
ggcgtccag gtagccaagg attgtacatg ggttgatga aatcagggat ggtcataagt 180
gaagagggcc aacaatggta tgaacctgag tgggtggaaat ttggagattc aaaaacgtat 240
tttcgacacg cttctgggtc tttgtttatc ctctcaaaaa atttggtctg ctacatcaac 300
ataaatagcg cgtcactgca gagttatgca cacgatgata tatcagtagg ttcatggatg 360
atgggactga atgcaactta cgtggatgat gaccggttgt gctgcagcag ttccagacaa 420

gaga

424

<210> 8835
<211> 441
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-E9

<400> 8835

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gagttgggat gccttgagag ctgccttgcc cgttggaaca gtcagtgggtg caccaaaggt 120
gaaggccatg gagttgattg ataagttgga agttacgagg cgaggaccat atagtgggtg 180
tctaggagga atatcgtttg atggtgacat gcaaattgca ctttctctcc gcaccatcgt 240
attctcaaca gcgccgagcc acaacacgat gtactcatac aaagacgcag ataggcgtcg 300
ggagtgggtc gtcctcttcc aagctgggtc aggcattggt gccgacagta gccagatga 360
cgaacaacgt gaatgcgaga ataaggctgc tgcactagct cgggccatcg atcttgcaga 420
gtcagctttt gtagacaaag a 441

<210> 8836
<211> 415
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-D6

<400> 8836

cggacgcgtg ggaacgcaaa accgcatcct ctcatcagct tccttccaca tgcgtctgga 60
gatctcggcc cgtcgccatg gacgcgatcg acagcgtggg ggatcccctc cgcgacttcg 120
ccaaggacag cgtccgcctc gtcaagcgtc gccacaagcc cgaccgcaag gagttcacca 180
aggtggcggc gcggacggcg atcgggttcg tcgtcatggg cttcgtcggc ttcttggtta 240
agctcatctt catccccatc aacaacatca tcgtcgggtc cggctaggct tacaggagta 300
cagggcgact agcatgggag tagtgcaata cttttgggag caatagataa cgaggatcct 360
ggtctttcga atagtattgg taatgaaatt tttcgttcgg ttgcgtttct gatgt 415

<210> 8837

<211> 404
 <212> DNA
 <213> Zea mays

 <223> unsure at all n locations
 <223> Clone ID: LIB3059-056-Q1-K1-D8

 <400> 8837

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 caacatagaa agcacaatag tgtaccaaca atggcagcca aaatattttg cctccttatg 120
 ctcttgggtc tttctgcaag tgctgtacc ggcaccattt tcccgcaatg ctcaacaagct 180
 cctatagctt cctttcttcc cccgtacctc tcaccagcgg tgtcttcggt atgtgaaaac 240
 ccaattcttc aaccctatag gatccaacag gcaatcgcag ctggcatctt acctttatca 300
 cccttggttc tccaacaatc atcagcccta ttacagcagt tacctttggt gcatntattg 360
 gcacaaaaca tcagggcaca acaactacaa caacttgtgc tagc 404

<210> 8838
 <211> 443
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-056-Q1-K1-D9

 <400> 8838

 cccacgcgtc cggaacaaga ggatctccaa gggaaagaag ggtggcaaga aggagaccgt 60
 cgaccctttc tctaagaagg attggtatga catcaaggca ccgtcgggtg tcagtgtgcg 120
 caacatcggg aagactctcg tatccaggac acaggggtacc aggattgctt ctgaggggtct 180
 gaagcacaga gtctttgagg tttgcctagc tgatcttcag ggcgacgagg atcaagctta 240
 caggaaaatc aggtccgtg ctgaagatgt gcagggcagg aatgtgctca caaacttttg 300
 gggatatgaat tttaccactg ataaactgag atccctagtg aagaagtggc agacattaat 360
 cgaagcccat gttgatgtca agacaaccga caactacatg ttgcgtttgt tctgcatcgg 420
 cttcacgaag aggcgcccac acc 443

<210> 8839
 <211> 410
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-E1

<400> 8839

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tggaacagtt cacacatgag atggagccat ttctacgcaa gcaaggactt ccagttcgct 120
tgaacaaagg tgttgtagag ttggttgag accatgtagt ttgtgaggaa ggaaagcccc 180
tttcgccaga agcagcgag actctcgagg tgcttgggat acaaattggc acattccgct 240
tataccttgt gtgtcgctgg tcgggcgatg actttgaagt ttacaaagaa ggcttgatgc 300
acctaggagc tgatgaatcc tcttaagctt ttgtttcctg tatacacaaa gggctcactt 360
gctgtctttg ctgggacagc ttttggtaac tgtgcgtgtg gccatgtacc 410

<210> 8840

<211> 437

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-E10

<400> 8840

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tatggactcc gagtctcagg gcgttgagcg acttccgatg cgcacttaga tgtctccgct 120
cgagtaccac tacgcctctc tacaagctta catgctcatg ctgaaactta ttcattctca 180
gctaagattc tacgaccagc ataggggggt gtcggcgcta ggcccatata tgggtacatg 240
catctggcag tgcattcttg gaagatttga tctctaaact gatctagcta catcagactc 300
tatcgatact acgacgcat ataggtatcg acttgtcacg ccatgctgca gatcgagagc 360
actctcgcta ctatgctgaa ctgctcatat gatcaggcgt agtatcgaat tcagagctgc 420
ataatctgac tagtcat 437

<210> 8841

<211> 442

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-E11

<400> 8841

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tatgtcctt ggtctttctg caagtgtgc taccgcgacc attttcccg aatgtccaca 120
agtcctata gcttcccttc ttccaccgta cctctcacca gcggtgtctt ccgtatgtga 180
aaaccaatt cttcaaccct ataggatcca tcaggcaatc acagctggca tcttaccttt 240
atcaccttg ttgtccaac aatcatcagc cctattacag cagttacctt tgggtgcattt 300
attggcacia aacatcatgg cacaacagct acaacatctt gtgctagcaa acctgtgtgc 360
ctactctcag caacagcagt ttcttacatt caaccaacta gctgcattga actctgtgtgc 420
ttatttgcaa caacaactac ca 442

<210> 8842
<211> 423
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3059-056-Q1-K1-E12
<400> 8842

cccacgcgtc cgcggacgcy tgggtcttta atctccttcc aaatctgaac gtggatgggc 60
taattaaagc ctttgcagtg aaaactaacg acatgatgct ggtgatatac ctgtcttctc 120
tgatccggag cgtcattgcy cttcacaatt taatcaacaa taagatgcta aacaaggagc 180
acgagaaggc cgaggattcy aaaccaaccg ccattcctac tgctgccgga agctaaacgt 240
gcttttgatc actgattgca ttggtggcta agaaaaggga agaaaacttgt gatgacatgt 300
tagcacgggt gtgctcgaac caactgtctt gaccttgaat ggacattcaa tatgtgcatt 360
ctatgtatga tcaggatcaac ggcaagagaa accaattaca ctgtatgagc tttagatcac 420
acc 423

<210> 8843
<211> 430
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3059-056-Q1-K1-E2
<400> 8843

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gctgctgcct accaccagca atttcttcca ttcaaccaac tagcagcatt gaactctcct 120
gcctatgtac agcagcaaca actactacca ttcagccagc tagctgctgt gagccctgct 180
gccttcttga cacagcaaca attggtgtcg ttctacctgc acgctgcgcc taacgttggc 240
accctcttac aactgcaaca attgctgcca ttcaaccaac ttgctttgac aaaccagca 300
gcgttctacc aacaacccat cattggtggg gccctctttt agattgctta tgagtatatag 360
ttcaataata aagttttttt gatgatgttt gtggcttccc agaaataaga agtacattt 420
ctagattctt 430

<210> 8844
<211> 379
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3059-056-Q1-K1-E3
<400> 8844

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tcggatacct aacacctgca atttcttcca ttcaaccac tcacagcatt gaactctcct 120
gcctatgtac agcagcaaca actactacca ttcattccagc tagctactga gaaccctgct 180
gccttcttga cacagcaaca attggtatcg tactacctgc acacttcgcc taacctaggc 240
accctcttac aactgcaaca attgctgaca ttcaacaac ttgctttgac aaacctcaca 300
tcttactacc tacatctcat caacagccgt accctctatt acaatgcata tgacttatct 360
ttcaataactc aagtttctt 379

<210> 8845
<211> 398
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3059-056-Q1-K1-E4
<400> 8845

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ctgcacgcgc agcgcacaaa aggagtccgc ggctgacaac gccgggatgt tggcaggcgg 120
catcaaggac gtgccggcga acgagaacga cctccagctc caggagctcg cgcgcttcgc 180

cgtcaatgag cacaacaaaa aggccaatgc tcttctgggg ttcgagaagc ttgtgaaggc 240
 caagacacaa gtggttgctg gcacgatgta ctatctcact attgaagtga aggatggcga 300
 agtcaataag ctctatgaag ctaaggtctg ggagaagcca tgggagaact tcaagcagct 360
 gcaggaattc aagcctgttg aagaggggtgc tagcgctt 398

<210> 8846

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-E5

<400> 8846

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 agtgtaccaa caatggcagc caaaatattt tgctcctta tgctccttg tatttctgca 120
 agtgcgtgcta cggcgacat tttcccgcaa tgctcacaag ctctatagc ttcccttctt 180
 ccccggtacc tctcaccagc ggtgtcttcg gtatgtgaaa acccaattct tcaaccctac 240
 aggatccaac aggcaatcgc agctggcatc ttacctttat cacccttggt cctccaacaa 300
 tcatcagccc tattacagca gttacctttg gtgcatttat tggcacaaaa catcagggca 360
 caacaactac aacaacttgt gctagcaaac cttgctggct 400

<210> 8847

<211> 418

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-E6

<400> 8847

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 cgctcatcta gaccagttc aatataagcg gcaaggggaag ctgcagcaaa agtccgacg 120
 agaacctata gcttgggggtt tcagctgggg ataaagtggc gtcgaccgag gcggagacct 180
 agggagagca taggggatgc gatagggaga gatgaatcaa tcaatcgatt cgtctgctga 240
 cgccccgtct aacgacccta ctactatcct gacgatcata ctgtcttttg gcgttctttc 300
 tccggtcttt gttcgttaga ctgtggaaca ccaggtgaag cgtcttcaga agattattca 360

ctatatattaga gtagatcggg tactgggttca tgggttagaat gattggaaga attagggtt 418

<210> 8848

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-E7

<400> 8848

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atcagcccta ttacagcagt tacctttggt gcattttattg gcacaaaaca tcagggcaca 120
acaactacaa caacttggtc tagcaaacct tgctgcctac tctcagcaac agcagtttct 180
tccattcaac caactagctg cattgaactc tgctgcttat ttgcaacaac aactaccatt 240
cagccagcta gctgctgctt accccaaca atttcttcca ttcaaccaac tggcatcatt 300
gaactctcct gcttatttac agcagcaaca actactacca ttcatccagc tagctggtgt 360
gagccctgct gccttcttga cacaacaaca gttattgccg ttctacctgc acgctgcgcc 420
t 421

<210> 8849

<211> 327

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-E8

<400> 8849

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ggcttcagcg gtggtggcgg ttctggcggg ggtggtggct tcggcgctgg cggctacggt 120
ggtggtctct gcggctcctt atggaaccga agctccgctg gtggttctga tggagaagct 180
ggcaaccgct gcggtggagg atgaaacggt ggcggtgacg gcgctggtgg acgatactgc 240
agcttccgaa ctggcgatga acttcatggc gtatttggat ttggccacct aggctaagct 300
agctctaata gcaagggacc ctccagc 327

<210> 8850

<211> 418

<212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-056-Q1-K1-D5
 <400> 8850
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 ctgacgttcg gtgtcattct agttatctcg ctggatgatg gaatcgttct caatttcact 120
 atgttttggt gcacaattgt gaactctgct ctgactacaa caatagtagg agttctcaag 180
 ggtgtcggat caacgaccct cggtttcggt ctggtgggag gtgtcgaagt acatgctctg 240
 aatgttactg gactggtgat caacacattt ggcggcgat ggtactctta tgcgaagtat 300
 aagcagaaaa ggaaaacacc acggaagatc caacatgatg tagagtcgca tgcccacaag 360
 tagcgtcaga ttaactgtag ttatacttcg gtcttcgatc tgattataac tggatgca 418

<210> 8851
 <211> 433
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-056-Q1-K1-C10
 <400> 8851

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 tctatgcagc aacgcatgtt tgctcaattg gatgaggaga agcgtctcaa tatggatatc 120
 tctgaatata ataagttact gaaggctgca tcagaaggaa agacaattgc cagtgaaaat 180
 ggaagtggcg aataacaaca tgagatgcct attagttctc tcgtaaaaaa tgcacttcat 240
 gttactgata ataccaagtt taagaggtac aaagcatatg gtccaaaccc actctcctgt 300
 aagaagaaga taccaaagct cccactgct attcaaaagc aggcaggtac ggctgatggc 360
 gagcataga ggaagaggtt tcggaagctg aagagaggcc aaaacgatta caagcaattg 420
 gaggtgcga act 433

<210> 8852
 <211> 443
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations

<223> Clone ID: LIB3059-056-Q1-K1-C11

<400> 8852

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gtgagcttta tcagaatctt ctttgacaca ctgttctcat tggacaaaac tgacaacttc 120
aagaaagggg atgggtgctg taagaagtgg gatgggtggac ctggtggtgg tgggcggggc 180
ccatatggcg gtggaggagg tggaggattc ggcggcggag gtggaggtgg ttcacggngt 240
cctcgactc tatctgacat ccaatccaat gaccacagtt ctctccctgc ttgtggatcc 300
tgctgtggct aataagcgtg caaccgttcc gcctgatgac tacgtataac anatgaatac 360
acatgcttct gtatgttctg aagaacatcg tagctattga tatgtattnt actgtcagac 420
gattgtatca taatcgatat gtc 443

<210> 8853

<211> 392

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-C12

<400> 8853

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gagagctttc tcagactatt cattgacaca ctggtctcat tgcacacaac tgacaactct 120
cagaaacggg atggggctg ctagaagtgg gatgggtggac ctggtgctcg cgtgcacagc 180
ccctatagcg gtggacgagg tgggaagattg ctcggacaaa gtgaacgtgc ttcacaggag 240
cactacaaca ctatctgaca tccaatccaa agaccacagt actctcactg caagaggata 300
ctgctgtgga tgataaacgt gaaaagcag agactgatga ctacatataa caaatgaata 360
cacatgcttc tgtatgttct gaagaacatc gt 392

<210> 8854

<211> 356

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-C2

<400> 8854

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gtctagcagc agccaccgcc gcctcaccct cgcagccgcc gtccctgctct ccgtgctcgc 120
ggctgccagc gccagcgccg ggacctcctg cgtgccgggg tgggccatcc cgcacaaccc 180
gctcccagc tgccgctggt acgtgaccag ccggacctgc ggcatcgggc cgcgcctccc 240
gtggccggag ctgaagagga gatgctgccg ggagctggcg gacatcccg cgtactgccg 300
gtgcacggcg ctgagcatcc tcatggacgg cgcgacccg ccggggcccg acgcgc 356

<210> 8855

<211> 419

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-C3

<400> 8855

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ggaaatgtac actggcatgt cagacttgca gcctgcttca cctacaattg atcgagggat 120
tgcaactcaa aagatgattc acttcatcac aatggccctt ggaggtgatg gctacttgaa 180
ttttatggga aatgagtttg gtcacccaga atggattgac tttccaagag aagggaaaca 240
ctggagctat gataaatgca gacgacagtg gagccttgatg gacactgatc acttgccgta 300
caagtacatg aatgcgtttg accaagcgat gaatgcgctc gatgagagat tttccttcct 360
ttcgctcgtc aagcagatcg tcagcgacat gaacgatgag gaaaagggtta ttgtctttg 419

<210> 8856

<211> 393

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-C4

<400> 8856

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acagctatgc cacgaagtcc aaccagacgc gggctcgtcaa gacccttggg ggcaagctcg 120
tgtaccagta caccaagaag agagccagcg ggcccaagtg tcccgtgacc gggaagaaga 180
tccagggcat tccccatctg aggccagctg agtacaaaag gtccaggttg tctaggaacc 240

gcagaactgt gaaccgtccc tatgggggag tactatctgg aactgcagtt agagaaagga 300
 tcatccgtgc tttcctgggt gaagagcaga agattgtcaa gaagggtgtg aaattacaga 360
 agaccaaaga caagactttc ttaaaaaagt tac 393

<210> 8857
 <211> 422
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-056-Q1-K1-C5
 <400> 8857

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 tgatgttaac aagttgatca aggagatccg gtctgatgtt tctgaagtag ttgcagctga 120
 cgagtttgag tacaaggatc cagttgatgg ctctgtgtcc aagcaccacg gcatccgata 180
 cctcttcgga gatggttcac gactgggtgtt ccgtctatcc ggaaccgggt ctgttggtgc 240
 caccatccgt gtctacatcg agcaatacga gaaggattcc tgcaagaccg gcagggattc 300
 acaggaggcc cttgctccac tgagttgatg ttgcgctcaa gctctccaag atgcaagagt 360
 aactggccg ctctgcccc accgttatca catagatttt tgaagagtga ttacaatga 420
 gg 422

<210> 8858
 <211> 403
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-056-Q1-K1-C7
 <400> 8858

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 cggcgggcgt gtgcttcgcg gccctgggtg ccgtggccgt ctgccaaggc gaggtcgagc 120
 ggcagaggct cagggacctg cagtgtggc aggaggtcca ggagagcccg ctcgacgcgt 180
 gccgtcaggt cctcgaccgg cagctaaccg gcggtgcgg ctgcagcagc gttggcccgt 240
 tccggtgggg caccgggctc cggatgcggt gctgccagca gctccaggac gtgagccgcg 300
 agtgccgatg cgccgtcatc cggagcatgg tcaggggcta cgaggaggcc atgccgccc 360

tgcagaaagg ctggtggcca tgggggcggc agcagcagcc gcc

403

<210> 8859

<211> 413

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-C8

<400> 8859

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ttttgcctcc ttatgtcctt tgggtctttct gcaagtgtctg ctacggcgac cattttcccg 120

caatgtctgc aagctcctat agcttccctt cttccccctg acctctcacc agcggtgtct 180

tcggtatgtg aaaacccaat tcttcaaccc tacaggatcc aacaggcaat cacagctggc 240

atcttacctt tatcaccctt gttcctccaa caatcatcag ccctattaca tcagttacct 300

ttggtgcatt tattggcaca aaacatcagg gcacaacaac tacaacaact tgtgctagca 360

aaccttgctg cctactctca gcaacagcag tttcttccat tcaaccaact agc 413

<210> 8860

<211> 448

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-C9

<400> 8860

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tctatgcagc aacgcaagtt tgetcaattg gatgaggaga agcgtctcaa tatggatata 120

tctgaatata agaagttact gaaggctgca tcagaaggaa agacaattgc cagtgaaaat 180

ggaagtggcg aagaacaaca tgagatgcct attagttctc ttgtaaaaaa tgcacttcat 240

gttactgata aaaccaagtt taagaggaac aaagcaaagg gtccaaaccc actctcctgt 300

aagaagaaga aaccaaagct cccacaggct attcaaaagc aggcaggtac ggctgatggc 360

gaggcaaaga ggaagagggt tcggaagcgg aagagaggcc aaaaagataa caagcaattg 420

gaggctgcga actagaagga tgggcttg 448

<210> 8861

<211> 423
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-D1

<400> 8861

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 gtgggatgga aaggtacaat ctgatgctga agaattactc atcatcaaga ccaggggaatc 120
 acttctggat gccttgactg cacatgtcaa agccaatcat gaatatgatg ttcttgaagt 180
 tattgctctg ccataactg gtggtaacac caagtatttg gaatggatca agaacagcac 240
 ccgggacaag tgatctcttt ttttttggag ctcgacataa tgcgatgatc gaagtgccca 300
 tggctcctta gctcttccag tggcttgac acaagggtgt atcctctctt gacctggaca 360
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 tgt 423

<210> 8862
 <211> 329
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-D10

<400> 8862

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 acacccatac tctaacaagg atcgctatga cgtcaaggca ccgtcgctgc acatcgctgc 120
 ctacatcgac aagactctct tattcatgac acatggttcc aagattgctt ctgacgatct 180
 gattcacaga gcctatgacg ttgcgctagc taatctttaa ggcgactagg atcacattga 240
 ctgaacgatc aagctcagcg ctgaagataa gcacgacagc aatgtgctca caaactaatg 300
 ctgcatgaaa ttaccagtg acaaactga 329

<210> 8863
 <211> 323
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-D2

<400> 8863

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cgcgacaatt ttccctcaat gtcacaagc tcctatagct tcccttcttt ccccataacc 180

ttccatcaat gatagcttca gtatgtgaaa acccagctct tcaagcctat aagctccaac 240

aagcaatcgc agcaagcaac atacctttat cacccttggt ggttcaacaa tcgccagccc 300

tatctttggt gcaatcattg gta 323

<210> 8864

<211> 423

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-C1

<400> 8864

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catctgatgc cctatccgcg gcaaccctga ttattgatag caagcctagc aagggctctgc 120

gcaagttctt gcagaaacat tgtgagggtg aacattagc agtagctgat tctaagcttg 180

gaaatgctat aaaagaaaag ctgaaaattg actgccttca caatagtgc gtgatggacc 240

tgatgagagg actgagaaat cagcttaccg agcttataac tgggtcgggt gcacaagacc 300

ttggtccaat gagcttgga ttgtcccaca gcttgtctag gtataagctg aagttcagcc 360

ctgagaaggt tgatacaatg atcattcaag ccattggatt attggatgat cttgacaagg 420

agc 423

<210> 8865

<211> 298

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-A3

<400> 8865

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gctgggtgctg ctgtgatctg tagcgtgggt gaactgatat acatgccaat aacgaatatc 120

cagtacaaga cggttcgtgcg tggccttgcc tgtagcaagg tcaagtagtc ctatgatagc 180
 gaattgaaca agtactggaa gaggtcfaat gcgcacaaga atcggatgat cgagacgcat 240
 aggtgaactg tgttcacgct ctgcacgatg aggtctgatg aagctattca gaaagaca 298

<210> 8866
 <211> 421
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-A4

<400> 8866

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 tcgatggcgg ctgccgtggg ggctgcggcg gctagccgtg ggtttggcgg tggtagaggc 180
 ctgagagggg acaggggagg gagaggtggc aggacccgca gaggcggccg tggcggctgt 240
 ggcaggggtg gccgcggcgg tggcatgaag ggcgtgagca aggcgcgtcg ggtggcgcac 300
 aagcacgccg gtgtcttcat cttcaagtcc aaggaggatg cgctctgcac taagaacatg 360
 gtcccgggag agtccgtgta ctgagagaag cgtgtcttcg ttcagaatga ggatggaaca 420
 a 421

<210> 8867
 <211> 299
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-A6

<400> 8867

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 aaaaaaaaaa aaaaaaaaaa aaaaaagggc tagcctcaaa tatatgacaa actaaaattt 180
 cccctactta caactgtaaa ttatatTTaa aatactacct aaaaaaaatt aatgggtccga 240
 atattaaaaa catcaacact gaaaaaaaac atggcttaca aaattaaata cttttaaaa 299

<210> 8868

<211> 395
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-056-Q1-K1-A7

 <400> 8868

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 cgtcagaaaa gaagcagtcg aacccgatgc gggagatcaa ggtgcagaag ctctgtctca 120
 atatctccgt tggagagagt ggagatcgac tcaccgcgc cgccaagggtg ttggagcagt 180
 tgagtgggca gtctccggtt ttctccaagg caaggatatac tgtgaggtct ttcggtattc 240
 gtcgtaatga gaagattgca tgctacgtta cggtcagggg ttagaaggca atgcagcttc 300
 ttgagagtgg ccttaaagtg aaagagtatg aacttctgaa gaggaacttc agtgaatctg 360
 gctggtttgg gtttgggtatt ccaggaccca ttgat 395

<210> 8869
 <211> 418
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-056-Q1-K1-A8

 <400> 8869

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 accaaggacc ttcggcgccc gttcaggatc cacatcttcc cgagcgagtt cttggttgac 180
 ctcttcccc ttcggaccac ctgcaaggct cttggtgtag cttgccactc tcaccaatca 240
 agttttcatg tctgatctcg acattcagat cccaactgcc ttcgatccct tcgctgaggc 300
 caatgctggg gactctggtg cggcagcagg gtcaaaggac tacgttcacg tgcgcatcca 360
 gcagcgtaat ggtcgcaaga gcctgactac cgtccaggga ttgaagaagg agttcagc 418

<210> 8870
 <211> 390
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-056-Q1-K1-A9

<400> 8870

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gatgggtcatc gttctcgtcg tgtgcctggc tctgtcagct gccagcgct ctgcaatgca 120
gatgccttgc ccctgcgcgg ggcgtgcaggg cttgtacggc gctggcgccg gcctgacgac 180
gatgatgggc gccggcgggc tgtacccta cgcggagtag ctgaagcagc cgcagtgcac 240
cccgttggcg gcggcgccct actacgcgg gtgtgggcag ccgagcgcca tgttccagcc 300
gctccggcaa cagtgtgtcc agcagcagat gaggatgatg gacgtgcagt ccgtcgcgca 360
tcagctgcag atgatgatgc agcttgagcg 390

<210> 8871

<211> 435

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-B10

<400> 8871

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agccctcctt gcgcttcttg ccctttttgt gagcgcaaca aatgcgttca ttattccaca 120
atgtcactt gtcctagtgc ccattatacc acagttcctt cgaccagtta cttcaatggg 180
cttogaacac ctagctgtgc aagcctacag gctacaacaa gcgcttgagg cgagcgtctt 240
acaacaacca attaaccaat tgcaacaaca atccttggca catctaacca taaaaccat 300
cgcaacacaa cagcaacaac agttcctacc agcactgagc caactagatg tggatgaacc 360
tgtcgtctac ttgcaacagc acgtgcttgc atccaacca cttgctctgg caaacgtagc 420
tgcataccaa caaca 435

<210> 8872

<211> 387

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-B11

<400> 8872

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agcacctact tgcgcttctt gcccttcattg tgagcgcgtc aaatgcgttc attattccac 120
aatgctcact tgctcctagt gccattatgc cacagtttct ccgaccagat acttcaatgg 180
gcttcgaaca cctagctgtg caagcctact ggctacaaca agctcttgct gctagcgtct 240
tacaacaacc atttaataca ttgcaacagc aatccttgct acatctaacc atacaacca 300
tcttatcaca acagcaacaa cagttcctac cagcactgag ccaactagat gtggtgaacc 360
ctgtcttcta cttgcaacag caagtgc 387

<210> 8873

<211> 428

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-B12

<400> 8873

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attataatga tttgatggag cttactgaaa ccatgttgct aggcattggtt aaggacctga 180
cagggtggcta taagataaaa tatcatgcaa atggagttac taacccccca atagaaattg 240
atttcacgcc taccttcaga aggatagata tgattaaaga tttggaggct atggccaatc 300
tcagtatacc aaaagatcta tcaagtgatg aagcgaatcg ttatttgata gaagcatgtg 360
tgaagtatga tgtgaaatgt ccaccttccc aaacgacatc gcggttgctt gacaagttgg 420
ttggccat 428

<210> 8874

<211> 233

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-B2

<400> 8874

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ttcgtaaata ctcaaacaga ggtatttact gaaaaaaact gctgtacgtt gtataggatt 120
cgatcttact tacgcactct tcctacggca tatctgtact ataggattca taaagactaa 180

tgataatgcc gccttcttaa attatcataa ctggcacaac caattctgct cca 233

<210> 8875
<211> 315
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-B3

<400> 8875

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gggtgaagat actcaaggcc cccaagtttg atctccggaa gttgatggag gttcatggcg 180
actacaaaga ggacgttggg gtgaagcttg agaggcctgt cgagggtgat gaggctatgc 240
atgagggttg tgctgccgag tagtttattt gctacttctt tatctagacg aatctggaca 300
ggaggtcocct tatga 315

<210> 8876
<211> 403
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-B4

<400> 8876

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gaacgtcaac cttggaccca ctgtccgtga aggagagtat gtctttgatg ttgatcacat 180
ctttgcatac tacaatgaca cctacattga tatgactgat ttgtctggta aggaaactct 240
ggttcggatc accggcggca tgaagggtgaa ggctgaccga gactagaccg aaccttacgc 300
tactatgctt actgctcaag atgtatcaca tagctgcaag gagcttggca ttactgcact 360
gcacattaag cttegtgccca ccggaggcat caagaccaat acc 403

<210> 8877
<211> 316
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-B5

<400> 8877

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acagtgcacac ttagtgatag tgaaaggata ctgctgatgt gaagattaat attgatggat 180
gagacatagc gctgtagaag ctgtcaagcc cgcagagcga atatgatgtg cagacattga 240
atcatatcca tgagatttct gcacatgaat aatattaaga ttaatgagac agctactggg 300
tctatatgaa tctaac 316

<210> 8878

<211> 409

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-B6

<400> 8878

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acaactactt tcatctagcc cgctcgcggg gggcaatgca cctacgtacc tacaacaaca 120
gttgctgcaa caaattgtac cagctctgac tcagctagct gtggcaaacc ctgctgccta 180
cttacaacag ttgcttccat tcaaccaact ggctgtgtca aactctgctg cgtacctaca 240
acagcgacaa cagttactta atccattggc agtggctaac ccattggctg ctaccttcct 300
gcagcagcaa caacaattgc tgccatacaa ccagttctct ttgatgaacc ctgccttgca 360
gcaacccatc gttggagggt ccatctttta gattacatat gagatgtac 409

<210> 8879

<211> 378

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-B7

<400> 8879

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gacggccgca acatcacctgt caacgaggcc cagtcccgcg gcggccgtgg aggcggcgcc 180
 ggtgggtacg gtggtggccg tggaggcgcc ggctacggcg gtggcgggcg ccgtgatggc 240
 ggtggcggtc acggcggtgg cggcggttac ggtggcagcg gctgctacag tgggtggtggc 300
 ggcggttacg gcggtggcaa ccgtggcgcc ggctacggca acttcgacgg gaactggagg 360
 aactgaacgg tggggccc 378

<210> 8880
 <211> 409
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-B8

<400> 8880

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 ggacagccta tgatcactgg agaaagcggg gttgatcacc ttgctgaaat catcaaggtt 180
 ctgggcacac gcacacgtga agaaattaag tgcatgaatc caaattatac ccagtataaa 240
 ttcccgcata tcaaagctca cccgtggcat aagatatcc ataaaatgat gcctgctgaa 300
 gcagtatctc tcgtgtccag gcttctgcag tactcaccaa aacttcgacg gactgctatg 360
 aaagcatcgg tccatccgtt ctttgatgaa cttcgggacg caaacaccc 409

<210> 8881
 <211> 445
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-B9

<400> 8881

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 acctctccg gtggttgaga gttccatgcc tccaccgctt gcatatgaag aagtcaatgg 180
 tatattcatg aggaatacgg tcgcagagtt ggtcgagacc gtggagtatt tcctggctga 240
 ggcaatccaa tcatatcgag cagagagcga cactgagctc aacctttcag ctggtgacta 300

catagtggtc cgaaaggtgt cgaacaatgg atgggccgaa ggtgaatgca gggggagagc 360
 tggctggttc ccctacgatt acatcgagaa acgagagcgt gtgcttgcaa gtaaagtcgc 420
 gcaagttttc taaaactaaa acttt 445

<210> 8882
 <211> 206
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-056-Q1-K1-A2
 <400> 8882

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 caatttggtc agaaagacat cccctacctg aacacctacg acgactgcac cattcgctac 120
 cccgacctaa ggggtggaat ggattgtgat ccatatgggtt cttcacaaaa tgtcaaggac 180
 ctaaataaat tatagtttaa aaatga 206

<210> 8883
 <211> 314
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-055-Q1-K1-G10
 <400> 8883

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 accccttatt tagctatata actttacatt ttctcatttt tttctttttt tttttttaa 180
 atttattttt tttttttctt tttctttttt ttttttttct tactctttat tttttttttt 240
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 ggtttttttt tttt 314

<210> 8884
 <211> 421
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-055-Q1-K1-G8

<400> 8884

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aaaggcaatg gataacatgt ggcacagcat ttgatccggt cccctgcgcc ttggtctgac 180

atggaatfff accttctttg tctgagcact ataataffff agtcctttca tatcattggc 240

ctatcttttag atctttctat gttgttgtga caagtctctgc gaaaacgcgt gacttgtttt 300

tgctttgtat aacgccttct atacattcgt actgtttatt ttattatctt ttatattggt 360

tattttttta ttcttttata taatttatat ttttttttta attatttttc ttattatttt 420

a 421

<210> 8885

<211> 258

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-G9

<400> 8885

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tctaataattg gcgtattggt gtaggctcta ttgatttata tggtgtcggt tttattaaat 180

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ttttttttat ttattata 258

<210> 8886

<211> 359

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-H10

<400> 8886

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aactcatcag cttcggcagc tcgtgctacc tgtgatcaac caagtagctc tggcaaactt 120

ttctccctac tctcatcaac aacaatttct tccattcaac caactgtcta cattgaaccg 180

tgctgcttat ttgcagcaac aactattacc attcaaccag ctagctactg cctactctca 240
tcaacaacaa cttctttcat ttaaccaatt taccgcactg aaccctctct gcttagtgca 300
tcttcaaata ctactaccat ttatcctgct agcttcatca atctctttct ttatttttt 359

<210> 8887
<211> 190
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-H6

<400> 8887

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taccacttgc tctcctactt cctcgccctc aacaacatct tactcaacat acctctctac 180
aacttcattt 190

<210> 8888
<211> 426
<212> DNA
<213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-H7

<400> 8888

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tccgcagtcg cttcattact gttgctagcg caagttataa ttttgatttt ttcttttttt 240
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gttttttttt atttattttt tttttttttt tatatttttt ttttctattt tttttttatt 360
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tatttt 426

<210> 8889
<211> 389
<212> DNA

<213> Zea mays

<223> unsure at all n locations

<223> Clone ID: LIB3059-055-Q1-K1-H8

<400> 8889

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tctgtgcaag ccaacatgca acaacaagcg cttgcggcga gcgtcttaca acaaccaatt 120

gcccaattgc aacaacaatc cttgccacat ctaacaatac aagccatcac aacgcaacag 180

caacaacagt tctaccagc actgagccac ctagccatgg tgaaccctgc cgcctacttg 240

caagagcagc tgcttgcac caaccactt gctctggcga acgtagtgc aaaccagcaa 300

caacaacagc tacaacagtt tctgccaacg ctcaagtcaac tagccatggg gaaccctgcc 360

gcctacgtac aacaacaaca actgctttc 389

<210> 8890

<211> 214

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-H9

<400> 8890

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aagcttgtga atgctctctt gtctaaacac aatgttcacc ttgtcacttt tccttctgct 180

aatactcata tctatgtttc ttatcttttc aata 214

<210> 8891

<211> 320

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-056-Q1-K1-A1

<400> 8891

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ccaaagatca atggaagctt gttgcctgca tcagttattg gtatgtactg tacatatctg 180

tgctacagtg gactctccag tgagccaagg gattacgaat gcaatgggct tcacaatcac 240
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gtctattctg ctgtccgcgc 320

<210> 8892
<211> 319
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3059-056-Q1-K1-A10
<400> 8892

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gctaaccccg caaccctctt acaactacaa caattgttgc ctttgtcca acttgctttg 180
acagaccag cggcctgcta ccaactacac atcattgggtg gtgccctctt ttagattgct 240
tattagtcgt aattcaataa taaagtttct tggatgatgt atgttgccaa ccagaaatat 300
gaagttacat ttccagaaa 319

<210> 8893
<211> 387
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3059-056-Q1-K1-A12
<400> 8893

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ggagtttcaa gttacatttg agatgtacat aatgaccata tataatcttc cagtagatta 180
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ttacctaaagg tctaacaag aggccgcagg cgagcccagt ccaattagat gatgtgaaaa 300
atttttggcc tttttttagt ctttggacat gttatcaaata taaggagggtc gtgctagcac 360
gatacccaaa ctaagaaata acaaaaa 387

<210> 8894
 <211> 464
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB3059-055-Q1-K1-E1

<400> 8894

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ccaatgtgga taacctcttc cctgtcatgc catctcagat taggaacata gcccgctttg  180
gcgtgtcctc agttgctgtc aagctctatg taattgggtgg ttccatttat ctagtttttc  240
ctcttactgt atattattac attatctttt ctattctatt ttgttatttc tttttatatt  300
tttatatggt tgtgttttta ttattcgttt ttttattttt ttattctttt tcttttattt  360
tttttttttt atttttttat ttttattatt tatattttatt tttatttttt ttttatatta  420
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<210> 8895
 <211> 302
 <212> DNA
 <213> Zea mays

<223> unsure at all n locations
 <223> Clone ID: LIB3059-055-Q1-K1-E11

<400> 8895

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tatatttttt ttattttttt ttatattatt tatttatttt ttatttttat ttatttatat  180
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tt                                                    302
  
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<210> 8896
 <211> 376
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-E12

<400> 8896

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tgcataagaac tgtggtgctt atttgcaaca acaattacca ttcagccagc tagttgctgc 120
ctacccccag caatttcttc cattcaacca actagcagca ttgaactctg ctgcttattt 180
acagcagcaa caactactac cattcagcca gctagctgat gtgagccctg ctgccttctt 240
gacacaacaa cagttgttgc cgttctacct gcacgctatg cctaacgctg gcaccctctt 300
acaactgcaa caattgctgc cattcaacca acttgctttg acaaactcat cagtgttcta 360
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<210> 8897

<211> 421

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-E3

<400> 8897

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tgtattctgg ctatgccgtg aggtgcaaag atcctatatc tgctcatgaa atgaccata 120
tggaagttca agtttgcaac aacacaaag aaattattcg gatgaacctt aacatttcat 180
gcaaagatgt tgcaggacag aattgcttcg atgaaaatag tgcaactggt ctctgggctg 240
ttgttcttag cgatattcac cttgaagttt tatcttttca agttattttt gaggggggtt 300
tattttcttt atttttattt tttttttttt tttattttat ttttttctat tttttttttt 360
tatatttttt tttttatttt tttttctttt tttttttatt tttttttata tattttattt 420
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<210> 8898

<211> 375

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-E8

<400> 8898

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atcatcgatc tgaacaccaa tggctaccaa gatattagcc ctccttgctc ttcttgccct 120
tttagtgagc gcaacaaatg cgttcattat tccacagtgc tcacttgctc ctagtgccat 180
tattccacag ttctctccac cagttacttc aatgggcttc gaacattcag ccgtgcaagc 240
ctacaggcta caactagcgc ttgctgctag cgccttacia caaccaatgg cccaatttca 300
acaacaatcc atggcacatc taacctaca aaccattgca tctcatcatc aactacaaca 360
ttttcttcca tcaact 375

<210> 8899
<211> 416
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3059-055-Q1-K1-E9
<400> 8899

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atacacatgt gttttattta atttatttta tttatatgtt tttatttttt ttttttttta 180
tccctttttt tttttttttt ttcttttttt ttttatttct tttttttctt tttctttttt 240
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tttatttttt tttttttttt ttttcatttt tttatatatt tttttttttt ttttattatt 360
tttttttatt atcttttcat tttttttttt tattttattt tttttttttt tttttt 416

<210> 8900
<211> 368
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3059-055-Q1-K1-F1
<400> 8900

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ctctgaaggt gaatggctct agtatgatga gaagggagaa tgccccgttg agctaggcaa 120
gctgcagtca acattcaaag tggtgaagcag gcaattgctt cctgcactac catatttatc 180

atcattttcta tccctccata tacttttgac attattgtga ttgacaacag gtgaagaagc 240
atgagagggg tgggaagact agatttgtct agatcgagtg acttggaatc tgacagatat 300
tggagttggc ggtgtataaa tggtagattt gggctgaagg tcatgctga tccgatctct 360
ttttcttc 368

<210> 8901
<211> 427
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3059-055-Q1-K1-F11
<400> 8901

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attcaacgtc gcgattcccg agccttactc tctctatcct gccagatcc tatctttttc 180
ataagatcct ttactcaaa ctctttttcc ttctttaatc tcttcatctc tatctgttct 240
atttaaatcat gctttaccta ttatcatttt atttttttca ttttttcttt attcttttct 300
tctctttatt gggggggcct tcattttttc ttattttttt tttattcttt tttttatat 360
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ttttttt 427

<210> 8902
<211> 379
<212> DNA
<213> Zea mays
<223> Clone ID: LIB3059-055-Q1-K1-F5
<400> 8902

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gtcagcattg aagtctcctg cttatttaca gcagcaacaa ctactaccat tcagccagct 120
agctggtgtg agccctgcta cttcttgat acaaccacag ttgttgccgt tctaccagca 180
cgctgcgcct aacgctggca cctcttaca actgaacaa ttgctgccat tcaaccaact 240
tgctttgaca aaccagcag cgttctacca acaaccatc attggtggtg ccctctttta 300

gatttcttat gagttatagt tcaataataa agtttttttg tctgatgttt gtggcttccc 360
 agaaataaga aagtacatt 379

<210> 8903
 <211> 310
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-055-Q1-K1-F6
 <400> 8903

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 ctttgattgc tatggcgtag ctgccgctct ataaggaatg catgaattcc aatgggcaac 120
 ttttgctca aaggcttaca ggtagccttg tacagcctgc aatcatgctc tagtaccagc 180
 aagcttaaag taactcctcc accatataac tcttttccat cttgaagcac tacatacaac 240
 tatctatgat tcaactctca atttactctt cattaatcca ttattaacgg gggctttttt 300
 tacattcttt 310

<210> 8904
 <211> 403
 <212> DNA
 <213> Zea mays
 <223> unsure at all n locations
 <223> Clone ID: LIB3059-055-Q1-K1-D9
 <400> 8904

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 gaaacattgg gcttgtaagg aaaatggacc ccgggccatt tggctaattg agttttgggtg 180
 tttgatgaac aacacaatcc atgagctaatt aagttttcta gtgtttatgt ntgtaagttt 240
 atatttttca atgatttttt tgactttatg aatttatgta tggttttttt tttttttata 300
 tctttttatt gggggggggg tttttttttt tttttattta tttttttttt ttctttatta 360
 tttttttttt tattattttt ttattatttt tggttttttt ttt 403

<210> 8905

<211> 282
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-055-Q1-K1-F8

 <400> 8905

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 agacgcccgc cgagctgtta agagaaaaca agagaatgct agatcgatcc atcagggaaa 180
 ttgagcgaga gagacaagga ttgcatgcc aggagaaaaa gtcctcact gatatcaaga 240
 aaacagctaa tgatggccag attggagctt gtcaaagtat tg 282

<210> 8906
 <211> 397
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-055-Q1-K1-B6

 <400> 8906

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 gccaaaatat tttgttctt tatgtctctt ggtctttctg caagtgttgc taccgcaacc 120
 attttcccac aatgttcaca agtcctata gtttcccttc tcccccata cctctcacca 180
 gcggtgtctt caatgtgtga aaaccaatt gttcaaccct acaggatcca acaggcaatc 240
 gcaacaggca tcttaccatt atcacccttg ttctccaac aaccgtcagc cctattacag 300
 cagttacctt tgggtccattt ggtggcacia aacatcaggg cacaacaact acaacaactt 360
 gtgctagcaa accttgctgc atactctcag caacatc 397

<210> 8907
 <211> 162
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-055-Q1-K1-B9

 <400> 8907

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tttcgggacc tcaatcctta cacctacacc aacattatcc aatataacta aaacatccat 120

cacaaattta tctactcctc ccattttaaa tatattaact ta 162

<210> 8908

<211> 241

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-C11

<400> 8908

cgcgctccggg cgttctgtaa actgtaaatt cgtatgtcga atctgacaat ctggacggat 60

tcagtccata tactaagatc tgggtgttgcg ggatctgtgg agttagttag ggttactttg 120

ctacctcgtt cagttgtgct tgtgaaatga aactgcagat ggttattaaa tcccctgcat 180

tttccctaaa tatatTTTTT ttatTTTTTt tattTTTTTt ttttattatt tttcatcttt 240

t 241

<210> 8909

<211> 284

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-C12

<400> 8909

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aaagttgctt ggaagccttt agaatcatta ccatatgatt ctctctgggca gacctttgtc 120

gcttttgaga agccagaaaag tgtcattgct actggcaagt tctcaaatat cctgaaattc 180

attgttaagg aggttgatcc atccacgggt gaaactgaag atgattgtgt tgaggatttg 240

tttccatctt taatttcttg attttatttt ttgttgatta tttt 284

<210> 8910

<211> 433

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-C3

<400> 8910

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 gtggtcttca cgggtttgct tgatgagctt ctggaggcca gtgagccgct tctgctgca 180
 tcacaatgaa gtgtgtgtat atagcagttc gttctgttgc tgtttctgct tgctgcatca 240
 caggattact tggataacgg tacgtatttg tattgtctga catatcttgt ggaaaggctg 300
 tcatactctt aaattctttt ggccattct taactttata tgttctgtac tgtgcttata 360
 tgtacttttt aactttattt cattttcttg atttcttggt tattcttatt ttttatttta 420
 tatttttttt ttt 433

<210> 8911
 <211> 419
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-055-Q1-K1-C6
 <400> 8911

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 gaagatgagg agctcggaga tgtagggagc ctogtaccac ctccgaagat actgtagatt 180
 cctatgatca tttggctgca ttgttctggc caccgcgcgc cgtctgcgct gttggagcag 240
 caggacaaa ttcccttgcg tggctcctgc tctttgcctt gtttgtttgc acgccaataa 300
 ggacccaaat ttccgtgcat gttaagagat gaaagaatcg ttccacagtt ttacagttga 360
 aggttttttt ctgtcactgt atgatacaat attattcttg tatctggaat ttatatattt 419

<210> 8912
 <211> 157
 <212> DNA
 <213> Zea mays
 <223> Clone ID: LIB3059-055-Q1-K1-C7
 <400> 8912

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 ttacaacttt cgccacggcc accaatcaca agacctacaa ttctctccta ttgaaagtta 120

accaaatacag atctgtgacc aatagtatct aatcttt 157

<210> 8913

<211> 367

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-D1

<400> 8913

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tttctcttct tgcccgttta gtgagcgcaa caaatgcgtt cattattcca cagtgtctcac 120

ttgctcctag tgccagtatt ccacagttcc tcccaccagt tacttcaatg ggcttcgaac 180

atccagccgt gcaagcctac atgctacaac tagcgcttgc tgcgagcgcc ttacaacaac 240

caattgcca attgcaacaa caatccttgg cacatctaac cctacaaacc attgcaacgc 300

atcaacaaca tcatcagttt ctgccatcac tgagccacct agccgttgtg aacccttttt 360

acctact 367

<210> 8914

<211> 406

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-D12

<400> 8914

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agttttcaaa tgggcaggct ccttcgccag gtgctcgtgt tgtctatgta gatggcacat 120

ttgatctttt ccacgctggc catgttgagt tcttcaggag tgccagacaa cttgggtgact 180

ttcttcttgt gggatatctat gacgactagt cgatcaggga tagaagaggc tgcgtttcta 240

taatgctatt ttcagtagcg tactcttggt gttcttgcct tctcttttgg ggggtgtat 300

atctatcttt tcatcttttt atgttttttt tttcttttat cttctttttt tattttatat 360

tcttttat 406

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<211> 412

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-D4

<400> 8915

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ctgcccagacc gagattactg cgttttagtga cagatacagag gaatttgaga agttgaacac 180

tgagggttctt ggtgtttcca ttgacagtgt gttctccac cttgcatggg tgctgacaga 240

catgatgtct atttttctct tctttcttat tttcttattt ttttttggtg tgtctttatt 300

tttttctttt ttcttttttt ttttttctt ttcttatttt tttttattat tttttttttt 360

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<210> 8916

<211> 429

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-D5

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ttgaaatata gtgggagagg ttgtgataat ttactttttt tatttttttt aattttattt 120

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tatttttttt tttttattat ttattttatt tttttttttt ttattttttt tttttttatt 240

attttttttt tttttttttt ttttttttat ttttttatta tttttttttt attttttttt 300

tatttttttt tggttttttt ttatatattt tattttattt ttattttatt tttattttatt 360

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tttttttta 429

<210> 8917

<211> 379

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-D6

<400> 8917

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aagcaacata cctgtatcgc ccttggtgtg tcaacaatcg ccagccctat ctttggtgca 120

gtcattggta caaacatca gggcacaaca gctgcagcaa ctctgtctac ctgtgatcaa 180

ccaagtagct ctggcaaacc tttctcccta ctctccgcaa caacaatttc ttccattcaa 240

ccaactgtct aactgaacc ctgctgctta tttgcagcaa caactattac catttagcca 300

gctagctact gcctactctc aacaacaaca acttcttcca ttttaaccaat tggccgcact 360

gataccccgc tgcttattt 379

<210> 8918

<211> 400

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-D7

<400> 8918

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cctcctgctg gaaggacggt gttactctgt tttgttattt gtctgtaatt ttaatttctt 180

tttttttttt tttttttttt ttcactcttt ttttttgttt ctatttcttt ttttattttt 240

tttgttttta tattttattt ttttttattt ttcttcttct ttttgtgggg ggggtttttt 300

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<211> 425

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-B4

<400> 8919

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cggcttggtc cttcagtcga tcctgcatca tcagcctcaa agcggccagt tctcgtagct 180
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 tgggttttta atattaatat tattattttt tttttattta ttatttttat attttttttt 360
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<210> 8920
 <211> 221
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-D8

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 ttctacacag tcctcacgag tgttatatct ctgaccgtg tatctctgaa acaaaaagtt 180
 gtagatactc ctgatatctt atccataatt ttcaaatttc c 221

<210> 8921
 <211> 391
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-054-Q1-K1-G8

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 aatctcaatg ccatgaacaa gtcacgaccc aagaagccat gggccctgtc cttctccttc 180
 ggccgtgccc tccaggcgag taccctcaaa gcctgggctg gcaagggtga gaacgtggag 240
 aaggctagag cggccttctt cgccaggtgc aaggccaact ccgaggctac cctcggcacc 300
 taaaagggtg atgctgccgc ctacacctag agccttcacg tcaaggacta caagtattga 360
 gttgcttctc ttgcatcc cggtgttttg a 391

<210> 8922
 <211> 197
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-054-Q1-K1-G9

 <400> 8922

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 gacatcaaca ggcacaacgt ctgcgccatg gaggtatagg cacaacagat taactgatgt 180
 accattgcct acattat 197

<210> 8923
 <211> 59
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-054-Q1-K1-H1

 <400> 8923

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<210> 8924
 <211> 370
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-054-Q1-K1-H12

 <400> 8924

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 ttatttgcag cagcaaatac tactaccatt tagccagcta gctgcagcaa accgtgcttc 180
 cttcttgaca cagcaacagt tgctgccttt ctaccagcag tttgcggcta accccgcaac 240
 cctottiaaa ctacaacaat tgttgccctt tgtccaactt gctttgacag acccagcggc 300
 cttctaccaaa caacacatca ttggtggtgc ctttttttag agtgcttatt agttgtaatt 360
 tcaataatta 370

<210> 8925
 <211> 287
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-054-Q1-K1-H2

 <400> 8925

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 gtggtcttca agtctggcaa aaatgttctt attgaattct atgccccctg gtgtgggcac 180
 tgcaagaagc tggcgcccat cttggaagag gcagccacca ctctcctgag tgacgacgaa 240
 gtacatgggtt gctgactacc accatacct tatgaaattc tttctaa 287

<210> 8926
 <211> 410
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-054-Q1-K1-H3

 <400> 8926

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 tgcgtctcct tgcccgcgcc gccgctcgcc gtttgcccct cgtctccgca ccgcgcgctg 120
 ttgtccatcc ttgtgcagca aaaatgacgg ctggctacat tgttgggtca ctggtcggat 180
 cttttgccat tgcatacctg tgtgacacat ttatctctga caagaaggca tttggaggta 240
 gcacccccaa gactgtttct gagaaggagt ggtggcaagc cacagacacc aagttccagg 300
 cctggcctcg cactgctggg ccaccggttg tcatgaacce tatcagccgc cagaacttca 360
 tcgtcaagtt cactgagtag gtttgggctg gagaagctgg ttctgctact 410

<210> 8927
 <211> 344
 <212> DNA
 <213> Zea mays

 <223> Clone ID: LIB3059-054-Q1-K1-H5

 <400> 8927

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 caactgcttt catctagccc tctcgctatg gttaatgcac ctacatacct gcaacaacag 180
 ttgttgcaac agattgtacc agctctgact cagctagctg tggcaaaccg tgctgcctac 240
 ttgcaacagc tgcttccatt caaccaactg actgtgtcga actctgctgc gtacctacat 300
 cagcgacaac cattacttaa tccactgtca gtggctaata catt 344

<210> 8928

<211> 199

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-054-Q1-K1-H6

<400> 8928

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<210> 8929

<211> 417

<212> DNA

<213> Zea mays

<223> Clone ID: LIB3059-054-Q1-K1-H8

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 <223> Clone ID: LIB3059-054-Q1-K1-H9

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 ccagcggatc tggtaacggc gctgtgcagc cctgatgaaa aggcccatgg taacttggat 180
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<210> 8931
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 <223> Clone ID: LIB3059-055-Q1-K1-A2

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 <223> Clone ID: LIB3059-055-Q1-K1-A6

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acggctattc tccagtgctg gactgtcaca cctttcacat tgttgtcgag ggggctgac 300
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<210> 8933
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 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-A8

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 catcatctcc gtcaagggaa tcaagggccg cctcaaccgc ctcccgtccg cctgcgtcgg 180
 cgacatggtc atggccaccg tcaagaaggg aaagcccgcac ctcaggaaga aagtgatgcc 240
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<210> 8934
 <211> 414
 <212> DNA
 <213> Zea mays

<223> Clone ID: LIB3059-055-Q1-K1-A9

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 cccaaggct atgctgtttt tgaacttctc caccggacct tttgattctt tcaagtctgc 180
 ctactctgct tcctcgtagg aattcaagga caaggaaatc aagttcctta ttggtttaca 240
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